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# OKLAHOMA BUSINESS BULLETIN

CENTER FOR ECONOMIC AND MANAGEMENT RESEARCH
COLLEGE OF BUSINESS ADMINISTRATION
THE UNIVERSITY OF OKLAHOMA

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## SUMMARY OF INDICATORS

| Category | 8 Mos. '87 | 8 Mos. '86 | Aug. '87 | Percentage Change<br>8 Mos. '87/86 | Percentage Change<br>Aug./July '87 |
|---|---|---|---|---|---|
| **Personal Income (Monthly Average)** | | | | | |
| Unadjusted ($000,000) | 3,427 | 3,388 | 3,473 | 1.2 | 0.5 |
| Adjusted for CPI ($000,000) | 1,014.2 | 1,035.6 | 1,013.4 | -2.0 | -0.1 |
| **Crude Oil Production (000 bbl)**[a] | 78,170 | 88,541 | 11,131 | -11.7 | 11.9 |
| **Industrial Power Sales (000,000 Kwh)**[b] | 5,413 | 5,410 | 725 | 0.1 | 1.1 |
| **Total Bank Deposits (Monthly Average) ($000,000)**[c] | | | | | |
| Demand | 7,506 | 7,427 | 7,529 | 1.1 | 0.0 |
| Savings | 25,625 | 26,555 | 25,377 | -3.5 | -0.9 |
| **Savings and Loan Associations ($000,000)** | | | | | |
| Assets | 9,986.6 | 10,060.3 | 10,136.2 | -0.7 | 1.9 |
| New Mortgage Loans Closed | 679.5 | 1,026.6 | 82.6 | -33.8 | 22.2 |
| **Employment**[d] | | | | | |
| Total Labor Force (000) | 1,566.8 | 1,596.6 | 1,553.5 | -1.9 | -0.9 |
| Total Employment (000) | 1,444.9 | 1,464.7 | 1,451.6 | -1.4 | -0.4 |
| Unemployment Rate (%) | 7.8 | 8.3 | 6.6 | — | — |
| **General Business Index** | 93.6 | 90.5 | 93.9 | 3.4 | -0.1 |

Note: Includes revisions.

[a] 7 months and July data.

[b] Sales of larger privately owned utility companies.

[c] Total deposits of all depository institutions.

[d] Civilian Labor Force.

## RETAIL TRADE IN SELECTED CITIES
($000)

| City | Aug. '87<br>Adjusted | Aug. '87<br>Unadjusted | Adjusted<br>'87/'86<br>8 Mos. | Adjusted<br>1987<br>Aug./July |
|---|---|---|---|---|
| Ada | 13,795 | 13,532 | -5.4 | -2.9 |
| Altus | 12,644 | 12,169 | -8.0 | -7.8 |
| Alva | 2,515 | 2,551 | -29.0 | -20.0 |
| Anadarko | 4,768 | 4,880 | -14.8 | -4.3 |
| Ardmore | 18,957 | 19,494 | -5.8 | -2.3 |
| Bartlesville | 19,573 | 18,816 | -5.0 | -3.1 |
| Blackwell | 3,061 | 3,026 | -11.7 | -13.7 |
| Broken Arrow | 18,121 | 17,717 | -7.7 | -8.0 |
| Chickasha | 9,133 | 8,725 | -8.2 | -8.8 |
| Clinton | 6,025 | 5,852 | -7.1 | -14.6 |
| Cushing | 5,594 | 5,245 | -14.3 | 0.4 |
| Del City | 11,416 | 11,215 | 10.7 | -1.6 |
| Duncan | 13,970 | 13,541 | -8.6 | -6.9 |
| Durant | 10,329 | 10,485 | 4.2 | -2.6 |
| Edmond | 24,287 | 25,272 | -13.9 | 4.4 |
| Elk City | 7,330 | 7,374 | -11.5 | -8.9 |
| El Reno | 7,450 | 7,210 | -10.8 | -13.1 |
| Guthrie | 4,811 | 5,016 | -12.3 | -12.6 |
| Guymon | 4,172 | 4,283 | -10.6 | -7.8 |
| Henryetta | 4,592 | 4,763 | -11.0 | -4.7 |
| Hobart | 2,377 | 2,271 | -10.3 | -6.7 |
| Holdenville | 2,866 | 2,683 | -10.5 | -4.1 |
| Hugo | 3,028 | 3,055 | -8.4 | 3.8 |
| Idabel | 3,742 | 3,809 | -10.4 | -7.9 |
| Lawton | 48,618 | 48,784 | -0.8 | -6.7 |
| McAlester | 9,800 | 9,929 | -7.4 | -4.7 |
| Miami | 11,087 | 10,672 | -8.8 | -4.4 |
| Midwest City | 33,147 | 32,958 | -8.6 | -1.6 |
| Moore | 14,040 | 13,733 | 0.1 | -1.5 |
| Muskogee | 28,674 | 28,277 | -3.6 | -9.3 |
| Norman | 60,513 | 59,674 | -8.3 | -8.3 |
| Oklahoma City | 273,046 | 265,279 | -4.6 | -5.9 |
| Okmulgee | 5,802 | 5,865 | -6.9 | -6.3 |
| Pauls Valley | 3,622 | 3,782 | -11.3 | -14.1 |
| Pawhuska | 1,549 | 1,682 | -15.2 | 8.9 |
| Ponca City | 15,855 | 15,881 | -5.0 | -7.2 |
| Poteau | 4,571 | 4,433 | -3.2 | -6.0 |
| Sand Springs | 8,291 | 8,296 | -3.3 | -3.1 |
| Sapulpa | 12,545 | 12,351 | -9.3 | -8.1 |
| Seminole | 5,715 | 5,543 | -12.5 | -6.9 |
| Shawnee | 23,345 | 23,440 | -3.7 | -4.0 |
| Stillwater | 22,255 | 25,548 | 2.2 | -6.5 |
| Tahlequah | 7,459 | 7,735 | -2.2 | -4.4 |
| Tulsa | 233,660 | 230,374 | -5.9 | -6.2 |
| Watonga | 1,634 | 1,702 | -8.5 | -9.9 |
| Weatherford | 5,375 | 5,470 | -12.7 | -6.8 |
| Wewoka | 1,164 | 1,140 | -7.6 | -7.5 |
| Woodward | 11,187 | 11,080 | -10.1 | -4.2 |
| **Total** | 1,057,510 | 1,046,612 | -5.9 | -5.9 |

## RETAIL TRADE IN METRO AREAS AND STATE
($000)

| | 8 Mos. '87 | 8 Mos. '86 | Aug. '87 | | Percentage Change | | |
|---|---|---|---|---|---|---|---|
| | | | | | 8 Mos. '87/'86 | Aug./July '87 | |
| Retail Trade | Adjusted | Adjusted | Adjusted | Unadjusted | Adjusted | Adjusted | Unadjusted |
| **OKLAHOMA CITY MSA** | | | | | | | |
| Food | 1,481,416 | 1,506,965 | 183,740 | 190,270 | -1.7 | -3.7 | 0.6 |
| Apparel | 121,522 | 128,017 | 15,462 | 14,600 | -5.1 | 1.1 | 9.2 |
| General Merchandise | 464,774 | 487,737 | 59,985 | 60,470 | -4.7 | 3.3 | 15.1 |
| Furniture | 190,224 | 177,190 | 23,364 | 24,542 | 7.4 | 5.8 | 13.2 |
| Lumber | 112,086 | 136,293 | 13,687 | 15,380 | -17.8 | -2.4 | -6.2 |
| Auto Dealers | 1,077,589 | 1,202,379 | 154,104 | 134,808 | -10.4 | -17.3 | -20.2 |
| Service Stations | 137,438 | 148,374 | 18,186 | 20,064 | -7.4 | 1.8 | 9.5 |
| All Other | 450,153 | 449,069 | 63,133 | 61,963 | 0.2 | 20.4 | 7.9 |
| Total | 4,035,202 | 4,236,024 | 531,661 | 522,097 | -4.7 | -4.5 | -2.9 |
| **TULSA MSA** | | | | | | | |
| Food | 881,884 | 905,309 | 107,609 | 110,031 | -2.6 | -3.0 | -0.3 |
| Apparel | 111,775 | 114,007 | 14,934 | 15,133 | -2.0 | 6.3 | 27.0 |
| General Merchandise | 378,743 | 383,563 | 48,926 | 50,235 | -1.3 | -0.1 | 7.8 |
| Furniture | 150,044 | 157,182 | 18,997 | 17,600 | -4.5 | 2.8 | -6.1 |
| Lumber | 92,231 | 109,968 | 10,731 | 11,727 | -16.1 | -5.3 | -13.7 |
| Auto Dealers | 626,990 | 699,595 | 89,663 | 78,437 | -10.4 | -17.3 | -20.2 |
| Service Stations | 112,905 | 121,904 | 14,940 | 16,483 | -7.4 | 2.8 | 9.5 |
| All Other | 51,728 | 57,117 | 7,490 | 5,759 | -9.4 | 74.9 | -15.7 |
| Total | 2,406,300 | 2,548,645 | 313,290 | 305,405 | -5.6 | -5.4 | -5.0 |
| **ENID MSA** | | | | | | | |
| Food | 74,869 | 77,705 | 8,733 | 9,215 | -3.6 | -12.8 | -10.2 |
| Apparel | 112,239 | 12,397 | 1,502 | 1,377 | -1.3 | -6.0 | -15.6 |
| General Merchandise | 31,837 | 32,035 | 4,226 | 4,030 | -0.6 | 4.5 | 3.0 |
| Furniture | 8,102 | 8,030 | 884 | 874 | 0.9 | -29.7 | -32.7 |
| Lumber | 10,677 | 11,693 | 1,344 | 1,386 | -8.7 | -16.2 | -27.0 |
| Auto Dealers | 61,675 | 68,809 | 8,820 | 7,716 | -10.4 | -17.3 | -20.2 |
| Service Stations | 10,132 | 10,941 | 1,341 | 1,479 | -7.4 | 2.8 | 9.6 |
| All Other | 23,157 | 21,802 | 3,039 | 2,907 | 6.2 | 14.6 | 5.2 |
| Total | 232,688 | 243,412 | 29,889 | 28,984 | -4.4 | -9.8 | -11.6 |
| **LAWTON MSA** | | | | | | | |
| Food | 127,021 | 122,845 | 16,270 | 17,101 | 3.4 | 1.7 | 6.9 |
| Apparel | 14,922 | 13,720 | 1,890 | 1,827 | 8.8 | 2.6 | 11.3 |
| General Merchandise | 91,473 | 78,521 | 11,818 | 11,463 | 16.5 | 2.5 | 6.1 |
| Furniture | 17,351 | 21,048 | 1,837 | 1,774 | -17.6 | -17.9 | -33.0 |
| Lumber | 12,919 | 15,721 | 1,609 | 1,785 | -17.8 | -4.2 | -8.8 |
| Auto Dealers | 82,193 | 91,712 | 11,753 | 10,282 | -10.4 | -17.3 | -20.2 |
| Service Stations | 6,916 | 7,459 | 915 | 1,010 | -7.3 | 2.8 | 9.5 |
| All Other | 25,329 | 28,159 | 2,946 | 3,677 | -10.1 | -4.5 | 6.0 |
| Total | 378,124 | 379,185 | 49,038 | 48,919 | -0.3 | -4.7 | -2.8 |
| **MUSKOGEE AREA** | | | | | | | |
| Food | 90,325 | 93,628 | 10,815 | 11,785 | -3.5 | -10.0 | -11.0 |
| Apparel | 12,633 | 12,533 | 1,466 | 1,521 | 0.8 | -7.5 | -6.5 |
| General Merchandise | 26,173 | 27,542 | 3,735 | 3,642 | -5.0 | 7.5 | 8.4 |
| Furniture | 8,474 | 9,911 | 1,060 | 1,226 | -14.5 | 2.4 | 18.8 |
| Lumber | 3,593 | 4,116 | 419 | 465 | -12.7 | -11.8 | -20.8 |
| Auto Dealers | 51,848 | 57,864 | 7,412 | 6,486 | -10.4 | -17.3 | -20.2 |
| Service Stations | 8,871 | 9,590 | 1,171 | 1,294 | -7.5 | 2.7 | 9.5 |
| All Other | 23,916 | 21,752 | 3,468 | 2,985 | 9.9 | 6.0 | -3.6 |
| Total | 225,833 | 236,936 | 29,546 | 29,404 | -4.7 | -7.5 | -8.8 |
| **STATE**[a] | | | | | | | |
| **Durable Goods** | 3,833,040 | 4,281,358 | 522,295 | 484,220 | -10.5 | -13.6 | -15.1 |
| Auto Dealers | 2,692,579 | 3,004,677 | 385,024 | 336,813 | -10.4 | -17.3 | -20.2 |
| Accessory Dealers | 218,271 | 230,476 | 27,377 | 29,215 | -5.3 | 2.2 | -1.0 |
| Total Automotive | 2,910,850 | 3,235,153 | 412,401 | 366,028 | -10.0 | -16.3 | -18.9 |
| Furniture | 167,749 | 184,766 | 19,898 | 20,674 | -9.2 | 3.7 | 6.5 |
| Household Appliances | 149,105 | 158,247 | 20,274 | 20,552 | -5.8 | 14.7 | 13.3 |
| Total Furniture and Appliances | 316,854 | 343,013 | 40,172 | 41,226 | -7.6 | 9.0 | 9.8 |
| Lumber and Building Materials | 370,683 | 427,800 | 44,271 | 49,188 | -13.4 | -0.3 | -4.4 |
| Hardware Stores | 41,790 | 42,749 | 5,156 | 5,274 | -2.2 | 6.6 | -2.6 |
| Total Lumber, Building Materials & Hardware | 412,473 | 470,549 | 49,427 | 54,462 | -12.3 | [illegible] | -4.2 |
| **Nondurable Goods** | 6,877,272 | 7,383,992 | 775,206 | 820,129 | -6.9 | [illegible] | 4.5 |
| Apparel | 417,356 | 421,335 | 51,635 | 50,619 | -0.9 | [illegible] | 2.9 |
| Drug Stores | 361,739 | 327,134 | 44,292 | 42,941 | 10.6 | [illegible] | -0.2 |
| Eating and Drinking Places | 1,267,448 | 1,242,228 | 160,738 | 181,544 | 2.0 | [illegible] | 11.2 |
| Food Group | 2,626,347 | 3,097,252 | 256,216 | 272,210 | -15.2 | -7.2 | 1.1 |
| Service Stations | 451,279 | 487,233 | 59,711 | 65,879 | -7.4 | [illegible] | 9.5 |
| General Merchandise Group | 1,262,336 | 1,297,445 | 155,454 | 160,408 | -2.7 | -1.4 | 11.2 |
| **Total Retail Trade** | 10,710,312 | 11,665,350 | 1,297,501 | 1,304,349 | -8.2 | -7.5 | -3.8 |

[a] Total includes data for categories not shown in the table.

## ENID AND LAWTON MSAs
## MUSKOGEE MA

| Category | 8 Mos. '87 | 8 Mos. '86 | Aug. '87 | Percentage Change<br>8 Mos. '87/'86 | Percentage Change<br>Aug./July '87 |
|---|---|---|---|---|---|
| **ENID MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 29,772 | 31,700 | 29,700 | -6.1 | -0.8 |
| Total Employment | 27,503 | 29,200 | 27,865 | -5.8 | -0.9 |
| Unemployment Rate (%) | 7.6 | 7.9 | 6.1 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 998 | 1,328 | 325 | -24.8 | 170.8 |
| Number of Units | 11 | 19 | 3 | -42.1 | 200.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 2,000 | 0 | — | 0.0 |
| Number of Units | 0 | 62 | 0 | — | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 433 | 70 | 49 | 518.0 | 0.0 |
| Industrial ($000) | 1,194 | 1,587 | 0 | -24.8 | 0.0 |
| Institutional ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 0 | 193 | 0 | — | 0.0 |
| All Other Nonbuilding ($000) | 278 | 9 | 39 | E | 0.0 |
| Total Construction ($000) | 2,903 | 5,186 | 325 | -44.0 | 56.3 |
| **LAWTON MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 47,750 | 48,500 | 47,425 | -1.5 | -1.7 |
| Total Employment | 45,297 | 46,100 | 45,075 | -1.7 | -1.9 |
| Unemployment Rate (%) | 5.2 | 5.0 | 5.0 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 13,786 | 15,781 | 936 | -12.6 | -44.6 |
| Number of Units | 214 | 252 | 13 | -15.1 | -51.9 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 400 | 2,119 | 0 | -81.1 | 0.0 |
| Number of Units | 16 | 78 | 0 | -79.5 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 2,766 | 4,509 | 496 | -38.7 | -23.3 |
| Industrial ($000) | 20 | 408 | 0 | -95.1 | 0.0 |
| Institutional ($000) | 0 | 1,638 | 0 | — | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 499 | 2,207 | 0 | -77.4 | — |
| All Other Nonbuilding ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Total Construction ($000) | 17,471 | 26,661 | 1,432 | -34.5 | -41.1 |
| **MUSKOGEE MA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 32,953 | 33,000 | 32,375 | -0.1 | -0.5 |
| Total Employment | 30,081 | 29,900 | 29,800 | 0.6 | -0.3 |
| Unemployment Rate (%) | 8.7 | 9.3 | 8.0 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 4,392 | 1,008 | 618 | 335.6 | 0.0 |
| Number of Units | 60 | 15 | 9 | 300.0 | 0.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 1,427 | 2,167 | 381 | -34.1 | 36.9 |
| Number of Units | 35 | 40 | 9 | -12.5 | 28.6 |
| Nonresidential | | | | | |
| Commercial ($000) | 8,354 | 253 | 470 | E | 136.0 |
| Industrial ($000) | 2,465 | 0 | 0 | — | — |
| Institutional ($000) | 1,523 | 1,629 | 0 | -6.5 | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 79 | 319 | 0 | -75.4 | — |
| All Other Nonbuilding ($000) | 14 | 15 | 0 | -9.4 | — |
| Total Construction ($000) | 18,253 | 5,391 | 1,468 | 238.6 | -25.2 |

Note: Includes revisions.

E = Exceeds 600 percent

Sources for all tables: Local utilities companies; 10th Federal Reserve District Member Banks; Federal Home Loan Bank of Topeka; Oklahoma Employment Security Commission; United States Department of Commerce, Construction Statistics Division; Oklahoma Department of Transportation, *Progressive Report of the Transportation Director;* Center for Economic and Management Research, College of Business Administration, The University of Oklahoma. The data for all tables were compiled by Marjorie E. Earley, Statistician for CEMR and Brian M. Hickey, Research Assistant.

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**Norman, Oklahoma 73069**

## OKLAHOMA CITY AND TULSA MSAs

| Category | 8 Mos. '87 | 8 Mos. '86 | Aug. '87 | Percentage Change 8 Mos.'87/'86 | Percentage Change Aug./July '87 |
|---|---|---|---|---|---|
| **OKLAHOMA CITY MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 503,513 | 519,200 | 502,700 | -3.0 | -1.3 |
| Total Employment | 471,612 | 484,100 | 474,400 | -2.6 | -1.0 |
| Unemployment Rate (%) | 6.3 | 6.8 | 5.6 | — | — |
| **Mortgage Loans Closed ($000,000)**[a] | 161.9 | 227.7 | 13.9 | -28.9 | -9.8 |
| **Bank Deposits ($000,000)**[b] | | | | | |
| Demand Deposits | 910.6 | 939.3 | 906.5 | -3.1 | 4.9 |
| Time and Savings Deposits | 1,751.4 | 2,193.4 | 1,507.8 | -20.2 | -9.2 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 107,558 | 134,410 | 11,656 | -20.0 | -28.4 |
| Number of Units | 1,733 | 2,243 | 187 | -22.7 | -26.1 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 1,344 | 25,349 | 143 | -94.7 | 0.0 |
| Number of Units | 59 | 885 | 5 | -93.3 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 83,413 | 40,360 | 22,081 | 106.7 | 108.9 |
| Industrial ($000) | 3,277 | 3,511 | 876 | -6.7 | 273.8 |
| Institutional ($000) | 12,882 | 4,953 | 4,130 | 160.1 | 2.9 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 35,922 | 31,116 | 4,366 | 15.4 | -61.7 |
| All Other Nonbuilding ($000) | 3,786 | 2,668 | 451 | 41.9 | -24.4 |
| Total Construction ($000) | 248,182 | 242,367 | 43,608 | 2.4 | 0.8 |
| **General Business Index** | 88.5 | 85.2 | 90.8 | 3.8 | -1.7 |
| **TULSA MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 358,625 | 357,500 | 358,600 | 0.3 | -0.9 |
| Total Employment | 328,650 | 327,300 | 332,900 | 0.4 | -0.5 |
| Unemployment Rate (%) | 8.4 | 8.4 | 7.2 | — | — |
| **Mortgage Loans Closed ($000,000)**[a] | 197.9 | 216.8 | 16.2 | -8.7 | -21.4 |
| **Bank Deposits ($000,000)**[b] | | | | | |
| Demand Deposits | 849.7 | 704.4 | 814.4 | 20.6 | -0.9 |
| Time and Savings Deposits | 2,326.9 | 2,037.3 | 2,259.6 | 14.2 | 0.2 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 87,279 | 79,206 | 10,252 | 10.2 | -5.9 |
| Number of Units | 1,262 | 1,284 | 154 | -1.7 | -3.8 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 11,376 | 31,512 | 0 | -63.9 | — |
| Number of Units | 531 | 834 | 0 | -36.3 | — |
| Nonresidential | | | | | |
| Commercial ($000) | 15,410 | 34,131 | 902 | -54.9 | -31.8 |
| Industrial ($000) | 5,726 | 4,054 | 0 | 41.2 | — |
| Institutional ($000) | 10,370 | 16,232 | 538 | -36.1 | E |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 13,580 | 10,560 | 3,573 | 28.6 | — |
| All Other Nonbuilding ($000) | 3,478 | 4,608 | 428 | -24.5 | -31.4 |
| Total Construction ($000) | 147,220 | 180,303 | 15,693 | -18.3 | -4.5 |
| **General Business Index** | 87.3 | 86.2 | 86.0 | 1.2 | -1.4 |

Note: Includes revisions.
E = Exceeds 600 percent.

[a] By Savings and Loan Associations.
[b] Total Deposits in Large Commercial Banks

## CONSTRUCTION, STATE

| Category | 8 Mos. '87 | 8 Mos. '86 | Aug. '87 | Percentage Change 8 Mos. '87/'86 | Percentage Change Aug./July '87 |
|---|---|---|---|---|---|
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 233,971 | 249,213 | 25,584 | -6.1 | -22.4 |
| Number of Units | 3,536 | 4,078 | 392 | -13.3 | -19.2 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 18,058 | 65,730 | 2,939 | -72.5 | 469.6 |
| Number of Units | 759 | 2,028 | 100 | -62.6 | 525.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 124,995 | 91,388 | 25,830 | 36.8 | 72.9 |
| Industrial ($000) | 13,092 | 11,092 | 941 | 18.0 | -78.9 |
| Institutional ($000) | 30,748 | 37,233 | 5,705 | -17.4 | 37.5 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 103,452 | 109,223 | 13,596 | -5.3 | -23.8 |
| All Other Nonbuilding ($000) | 7,900 | 8,342 | 904 | -5.3 | -32.5 |
| Total Construction ($000) | 532,215 | 572,221 | 75,499 | -7.0 | -0.9 |

Note: Includes revisions.

12/29/87 U8130-1 A

# OKLAHOMA BUSINESS BULLETIN

CENTER FOR ECONOMIC AND MANAGEMENT RESEARCH
COLLEGE OF BUSINESS ADMINISTRATION
THE UNIVERSITY OF OKLAHOMA

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The *Oklahoma Business Bulletin* is now combined with the *Review of Regional Economics and Business*. There will be four quarterly expanded editions of the *Bulletin* which will contain both articles and the usual statistical information on Oklahoma and its major centers. The remaining eight monthly issues of the *Bulletin* will contain only the statistical summaries, although articles on timely subjects might also appear in these inter-quarterly issues. The combination of these two publications will provide a more thorough examination of economic problems prevalent in Oklahoma as well as continuing to provide economic data which has long been presented in the *Oklahoma Business Bulletin*.

This publication change at the Center has been assisted by funding provided by the Robert S. and Grayce B. Kerr Foundation Inc., for which the Center is most grateful.

We at the Center are most hopeful that the Oklahoma oriented articles will assist State leaders and citizens in their efforts to solve the economic problems now facing the State.

George W. England
Director

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## SUMMARY OF INDICATORS

| | | | | Percentage Change | |
|---|---|---|---|---|---|
| Category | 9 Mos. '87 | 9 Mos. '86 | Sept. '87 | 9 Mos. '87/'86 | Sept./Aug. '87 |
| **Personal Income (Monthly Average)** | | | | | |
| Unadjusted ($000,000) | 3,436 | 3,386 | 3,504 | 1.5 | 0.7 |
| Adjusted for CPI ($000,000) | 1,015 | 1,033 | 1,017 | -1.7 | 0.2 |
| **Crude Oil Production (000 bbl)[a]** | 89,109 | 99,675 | 10,939 | -9.6 | -1.2 |
| **Industrial Power Sales (000,000 Kwh)[b]** | 6,140 | 6,106 | 727 | 0.6 | 0.3 |
| **Total Bank Deposits ($000,000)[c]** | | | | | |
| Demand | 7,520 | 7,402 | 7,633 | 1.6 | 1.4 |
| Savings | 25,550 | 26,479 | 24,956 | -3.5 | -1.7 |
| **Savings and Loan Associations ($000,000)** | | | | | |
| Assets | 10,006.6 | 10,044.5 | 10,167.3 | -0.4 | 0.3 |
| Mortgage Loans Closed | 740.8 | 1,115.5 | 61.3 | -33.6 | -26.8 |
| **General Business Index** | 93.7 | 90.8 | 94.6 | 3.2 | 0.7 |

Note: Includes revisions.

[a] 8 months and August data.

[b] Sales of larger privately owned utility companies.

[c] Total deposits of all depository institutions.

## SELECTED ECONOMIC INDICATORS

| | | | | Percentage Change | |
|---|---|---|---|---|---|
| Category | 9 Mos. '87 | 9 Mos. '86 | Sept. '87 | 9 Mos. '87/'86 | Sept./Aug. '87 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 260,482 | 273,232 | 26,197 | -4.7 | 1.2 |
| Number of Units | 3,917 | 4,459 | 379 | -12.2 | -3.8 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 18,058 | 67,965 | 0 | -73.4 | — |
| Number of Units | 759 | 2,108 | 0 | -64.0 | — |
| Nonresidential | | | | | |
| Commercial ($000) | 138,532 | 106,564 | 15,396 | 30.0 | -40.4 |
| Industrial ($000) | 13,333 | 15,355 | 241 | -13.2 | -74.4 |
| Institutional ($000) | 35,388 | 42,081 | 4,640 | -15.9 | -18.7 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 128,329 | 128,120 | 24,877 | 0.2 | 83.0 |
| All Other Nonbuilding ($000) | 8,511 | 8,772 | 611 | -3.0 | -32.4 |
| Total Construction ($000) | 602,633 | 642,090 | 71,962 | -6.1 | -5.1 |
| **EMPLOYMENT TRENDS** | | | | | |
| Total Labor Force (000)[a] | 1,563.8 | 1,594.6 | 1,539.7 | -1.9 | -0.9 |
| Total Employment (000) | 1,445.1 | 1,462.7 | 1,447.7 | -1.2 | -0.3 |
| Agriculture (000) | 38.1 | 47.2 | 34.7 | -19.3 | -16.4 |
| Nonagriculture (000) | 1,407.7 | 1,415.5 | 1,419.4 | -0.6 | 0.6 |
| Manufacturing (000) | 158.4 | 163.8 | 158.5 | -3.3 | -0.4 |
| Mining (000) | 53.2 | 55.9 | 54.5 | -4.8 | 0.9 |
| Government (000) | 249.8 | 249.2 | 246.3 | 0.2 | 4.1 |
| Contract Construction (000) | 39.7 | 41.1 | 40.4 | -3.5 | -1.9 |
| Services (000) | 226.9 | 224.4 | 230.2 | 1.1 | 0.3 |
| Retail Trade (000) | 213.5 | 216.0 | 213.7 | -1.2 | 0.2 |
| Unemployment Rate (%) | 7.6 | 8.3 | 6.0 | — | — |
| **Average Weekly Hours** | | | | | |
| Manufacturing (Per Worker) | 41.1 | 41.0 | 41.0 | 0.2 | -1.0 |
| **Average Weekly Earnings** | | | | | |
| Manufacturing ($ Per Worker) | 411.68 | 402.82 | 420.66 | 2.2 | 0.0 |
| Contract Construction ($ Per Worker) | 428.18 | 404.82 | 423.38 | 5.8 | -5.7 |
| Retail Trade Excluding Eating and Drinking Places($ Per Worker) | 191.96 | 189.70 | 197.47 | 1.2 | 1.4 |

Note: Includes revisions.

[a] Civilian Labor Force.

## RETAIL TRADE IN METRO AREAS AND STATE
($000)

| | | | | | Percentage Change | | |
|---|---|---|---|---|---|---|---|
| | 9 Mos. '87 | 9 Mos. '86 | Sept. '87 | | 9 Mos. '87/'86 | Sept./Aug. '87 | |
| Retail Trade | Adjusted | Adjusted | Adjusted | Unadjusted | Adjusted | Adjusted | Unadjusted |
| **OKLAHOMA CITY MSA** | | | | | | | |
| Food | 1,671,855 | 1,691,494 | 191,628 | 191,583 | -1.2 | 4.5 | 0.7 |
| Apparel | 133,528 | 142,700 | 13,452 | 13,331 | -6.4 | -5.3 | -0.1 |
| General Merchandise | 524,992 | 542,951 | 60,192 | 53,407 | -3.3 | 0.2 | -11.7 |
| Furniture | 213,218 | 205,299 | 22,805 | 22,854 | 3.9 | -2.8 | -6.9 |
| Lumber | 126,860 | 151,100 | 14,787 | 15,326 | -16.0 | 7.4 | -0.4 |
| Auto Dealers | 1,201,175 | 1,352,143 | 122,091 | 117,388 | -11.2 | -20.7 | -12.9 |
| Service Stations | 154,854 | 165,795 | 17,405 | 18,070 | -6.6 | -3.9 | -9.9 |
| All Other | 517,847 | 511,197 | 63,327 | 56,182 | 1.3 | -2.6 | -11.1 |
| Total | 4,544,329 | 4,762,679 | 505,687 | 488,141 | -4.6 | -4.9 | -6.5 |
| **TULSA MSA** | | | | | | | |
| Food | 991,742 | 1,015,854 | 111,129 | 108,424 | -2.4 | 3.2 | -1.5 |
| Apparel | 126,811 | 127,992 | 14,888 | 13,860 | -0.9 | -0.2 | -8.4 |
| General Merchandise | 429,697 | 429,314 | 50,370 | 46,498 | 0.1 | 2.7 | -7.4 |
| Furniture | 170,069 | 179,272 | 19,746 | 19,258 | -5.1 | 3.7 | 9.4 |
| Lumber | 103,814 | 122,178 | 11,698 | 11,924 | -15.0 | 8.3 | 1.7 |
| Auto Dealers | 698,897 | 786,734 | 71,037 | 68,301 | -11.2 | -20.7 | -12.9 |
| Service Stations | 127,214 | 136,217 | 14,298 | 14,845 | -6.6 | -3.9 | -9.9 |
| All Other | 56,897 | 63,002 | 4,638 | 5,469 | -9.7 | -36.7 | -5.0 |
| Total | 2,705,141 | 2,860,563 | 297,804 | 288,579 | -5.4 | -5.0 | -5.5 |
| **ENID MSA** | | | | | | | |
| Food | 84,462 | 87,291 | 9,659 | 8,925 | -3.2 | 10.9 | -3.1 |
| Apparel | 13,741 | 13,837 | 1,516 | 1,334 | -0.7 | 1.5 | -3.1 |
| General Merchandise | 35,928 | 35,721 | 4,124 | 3,569 | 0.6 | -1.8 | -11.4 |
| Furniture | 8,949 | 9,016 | 859 | 893 | -0.7 | -2.2 | 2.2 |
| Lumber | 11,984 | 13,045 | 1,323 | 1,410 | -8.1 | -0.5 | 1.7 |
| Auto Dealers | 68,748 | 77,380 | 6,988 | 6,719 | -11.2 | -20.7 | -12.9 |
| Service Stations | 11,415 | 12,226 | 1,283 | 1,332 | -6.6 | -3.9 | -9.9 |
| All Other | 26,133 | 24,685 | 2,849 | 2,874 | 5.9 | -6.6 | -1.1 |
| Total | 261,360 | 273,201 | 28,601 | 27,056 | -4.3 | -4.0 | -6.7 |
| **LAWTON MSA** | | | | | | | |
| Food | 141,859 | 137,774 | 15,321 | 14,886 | 3.0 | -5.0 | -13.0 |
| Apparel | 16,640 | 15,464 | 1,748 | 1,667 | 7.6 | -7.1 | -8.8 |
| General Merchandise | 103,404 | 87,557 | 12,125 | 10,318 | 18.1 | 2.6 | -10.0 |
| Furniture | 19,886 | 23,761 | 2,521 | 2,215 | -16.3 | 38.3 | 24.9 |
| Lumber | 14,653 | 17,582 | 1,705 | 1,723 | -16.7 | 5.5 | -3.5 |
| Auto Dealers | 91,619 | 103,036 | 9,312 | 8,953 | -11.1 | -20.7 | -12.9 |
| Service Stations | 7,793 | 8,335 | 876 | 910 | -6.5 | -3.9 | -9.9 |
| All Other | 28,731 | 31,786 | 2,798 | 3,785 | -9.6 | -9.7 | 2.9 |
| Total | 424,585 | 425,295 | 46,406 | 44,457 | -0.2 | -5.3 | -9.1 |
| **MUSKOGEE AREA** | | | | | | | |
| Food | 101,139 | 104,798 | 11,048 | 10,867 | -3.5 | 2.0 | -7.8 |
| Apparel | 14,420 | 14,178 | 1,750 | 1,650 | 1.7 | 16.9 | 8.5 |
| General Merchandise | 30,402 | 30,744 | 4,108 | 3,764 | -1.1 | 7.9 | 3.3 |
| Furniture | 9,541 | 11,223 | 1,047 | 968 | -15.0 | -1.8 | -21.0 |
| Lumber | 4,001 | 4,574 | 417 | 434 | -12.5 | -0.2 | -6.7 |
| Auto Dealers | 57,792 | 65,068 | 5,872 | 5,648 | -11.2 | -20.7 | -12.9 |
| Service Stations | 9,991 | 10,711 | 1,121 | 1,165 | -6.7 | -3.9 | -10.0 |
| All Other | 27,447 | 25,276 | 3,501 | 3,163 | 8.6 | 1.1 | 6.0 |
| Total | 254,733 | 266,572 | 28,864 | 27,659 | -4.4 | -2.7 | -5.9 |
| **STATE**[a] | | | | | | | |
| Durable Goods | 4,288,816 | 4,800,355 | 452,696 | 439,301 | -10.7 | -13.3 | -9.3 |
| Auto Dealers | 3,001,353 | 3,378,932 | 305,041 | 293,289 | -11.2 | -20.7 | -12.9 |
| Accessory Dealers | 248,066 | 257,399 | 29,740 | 29,157 | -3.6 | 8.3 | -0.2 |
| Total Automotive | 3,249,419 | 3,636,331 | 334,781 | 322,446 | -10.6 | -18.8 | -11.9 |
| Furniture | 188,443 | 204,826 | 20,522 | 20,306 | -8.0 | 1.9 | -1.8 |
| Household Appliances | 170,296 | 177,503 | 21,010 | 20,634 | -4.1 | 3.9 | 0.4 |
| Total Furniture and Appliances | 358,739 | 382,329 | 41,532 | 40,940 | -6.2 | 2.9 | -0.7 |
| Lumber and Building Materials | 418,377 | 476,278 | 47,518 | 50,344 | -12.2 | 6.7 | 2.4 |
| Hardware Stores | 47,327 | 48,012 | 5,485 | 5,241 | -1.4 | 5.8 | -0.6 |
| Total Lumber, Building Materials & Hardware | 465,704 | 524,290 | 53,003 | 55,585 | -11.2 | 6.6 | 2.1 |
| **Nondurable Goods** | 7,663,302 | 8,287,544 | 781,994 | 754,991 | -7.5 | 0.7 | -7.9 |
| Apparel | 469,805 | 472,386 | 52,576 | 50,209 | -0.5 | 1.6 | -0.8 |
| Drug Stores | 408,075 | 369,981 | 46,150 | 42,224 | 10.3 | 3.9 | -1.7 |
| Eating and Drinking Places | 1,419,386 | 1,398,163 | 153,356 | 151,062 | 1.5 | -4.5 | -11.9 |
| Food Group | 2,880,179 | 3,463,555 | 250,837 | 258,218 | -16.8 | -2.2 | -5.1 |
| Service Stations | 508,481 | 544,461 | 57,166 | 59,333 | -6.6 | -3.9 | -9.9 |
| General Merchandise Group | 1,417,404 | 1,446,082 | 155,560 | 141,159 | -2.0 | -0.2 | -12.0 |
| **Total Retail Trade** | 11,952,118 | 13,087,899 | 1,234,690 | 1,194,292 | -8.7 | -4.9 | -8.4 |

---

[a] Total includes data for categories not shown in the table.

## RETAIL TRADE IN SELECTED CITIES
($000)

| | | | | | Percentage Change | | |
|---|---|---|---|---|---|---|---|
| | 9 Mos. '87 | 9 Mos. '86 | Sept. '87 | | 9 Mos. '87/'86 | Sept./Aug. '87 | |
| Retail Trade | Adjusted | Adjusted | Adjusted | Unadjusted | Adjusted | Adjusted | Unadjusted |
| Ada | 119,915 | 126,681 | 13,393 | 12,588 | -5.3 | -2.1 | -7.0 |
| Altus | 107,132 | 116,358 | 11,848 | 10,769 | -7.9 | -5.5 | -11.5 |
| Alva | 24,588 | 35,104 | 2,247 | 2,256 | -30.0 | -10.9 | -11.6 |
| Anadarko | 40,249 | 46,805 | 4,627 | 4,386 | -14.0 | -1.7 | -10.1 |
| Ardmore | 161,058 | 170,366 | 18,242 | 16,854 | -5.5 | -4.6 | -13.5 |
| Bartlesville | 166,430 | 175,461 | 17,252 | 16,693 | -5.1 | -8.5 | -11.3 |
| Blackwell | 26,329 | 30,010 | 2,705 | 2,662 | -12.3 | -11.4 | -12.0 |
| Broken Arrow | 155,025 | 168,020 | 16,960 | 16,478 | -7.7 | -6.4 | -7.0 |
| Chickasha | 78,264 | 84,805 | 8,715 | 8,389 | -7.7 | -4.5 | -3.9 |
| Clinton | 52,775 | 56,928 | 5,622 | 5,360 | -7.3 | -7.0 | -8.4 |
| Cushing | 46,455 | 53,655 | 5,263 | 5,000 | -13.4 | -5.2 | -4.7 |
| Del City | 98,502 | 89,400 | 10,481 | 10,042 | 10.2 | -8.3 | -10.5 |
| Duncan | 116,078 | 127,621 | 12,592 | 11,892 | -9.0 | -9.9 | -12.2 |
| Durant | 89,038 | 86,091 | 9,472 | 9,153 | 3.4 | -7.6 | -12.7 |
| Edmond | 189,441 | 220,434 | 20,203 | 20,094 | -14.1 | -17.7 | -20.5 |
| Elk City | 62,547 | 69,944 | 7,042 | 6,599 | -10.6 | -3.8 | -10.5 |
| El Reno | 65,062 | 72,429 | 7,235 | 6,952 | -10.2 | -2.8 | -3.6 |
| Guthrie | 43,479 | 49,321 | 4,718 | 4,513 | -11.8 | -0.8 | -10.0 |
| Guymon | 38,092 | 42,636 | 4,133 | 3,955 | -10.7 | -0.7 | -7.7 |
| Henryetta | 39,545 | 44,137 | 4,435 | 4,218 | -10.4 | -2.4 | -11.4 |
| Hobart | 19,983 | 22,194 | 2,193 | 2,039 | -10.0 | -7.1 | -10.2 |
| Holdenville | 23,356 | 26,011 | 2,521 | 2,372 | -10.2 | -12.1 | -11.6 |
| Hugo | 23,631 | 25,781 | 2,476 | 2,396 | -8.3 | -19.0 | -21.6 |
| Idabel | 32,565 | 36,357 | 3,457 | 3,257 | -10.4 | -7.6 | 15.9 |
| Lawton | 423,238 | 426,192 | 47,151 | 44,314 | -0.7 | -2.7 | -9.2 |
| McAlester | 83,722 | 90,098 | 8,930 | 8,667 | -7.1 | -8.3 | -12.7 |
| Miami | 97,041 | 105,438 | 11,387 | 10,541 | -8.0 | 2.9 | -1.2 |
| Midwest City | 293,902 | 316,190 | 34,645 | 32,261 | -7.0 | 4.4 | -2.1 |
| Moore | 117,499 | 116,899 | 12,949 | 12,594 | 0.5 | -6.4 | -8.3 |
| Muskogee | 243,689 | 252,300 | 27,646 | 26,338 | -3.4 | -3.4 | -6.9 |
| Norman | 502,811 | 550,479 | 52,995 | 53,462 | -8.7 | -12.3 | -10.4 |
| Oklahoma City | 2,328,875 | 2,437,461 | 260,463 | 249,177 | -4.5 | -4.1 | -6.1 |
| Okmulgee | 47,851 | 50,635 | 5,749 | 5,439 | -5.5 | -0.6 | -7.3 |
| Pauls Valley | 33,130 | 36,818 | 3,882 | 3,781 | -10.0 | 6.6 | -0.0 |
| Pawhuska | 13,971 | 16,606 | 1,423 | 1,411 | -15.9 | -7.8 | -16.1 |
| Ponca City | 134,122 | 139,440 | 15,908 | 15,117 | -3.8 | 0.3 | -4.8 |
| Poteau | 37,526 | 41,382 | 3,553 | 3,338 | -9.3 | -21.9 | -24.7 |
| Sand Springs | 70,898 | 73,347 | 7,766 | 7,574 | -3.3 | -5.9 | -8.7 |
| Sapulpa | 107,060 | 117,491 | 11,571 | 11,006 | -8.9 | -7.6 | -10.9 |
| Seminole | 50,125 | 56,891 | 5,533 | 5,109 | -11.9 | -0.2 | -7.8 |
| Shawnee | 205,011 | 212,351 | 23,110 | 22,215 | -3.5 | -0.5 | -5.2 |
| Stillwater | 202,185 | 197,576 | 23,375 | 23,108 | 2.3 | 4.5 | -9.6 |
| Tahlequah | 66,446 | 67,478 | 7,439 | 7,266 | -1.5 | -0.1 | -6.1 |
| Tulsa | 2,044,617 | 2,167,877 | 228,762 | 220,460 | -5.7 | -1.9 | -4.3 |
| Watonga | 15,106 | 16,437 | 1,722 | 1,562 | -8.1 | 5.1 | -8.2 |
| Weatherford | 45,674 | 52,048 | 4,714 | 4,734 | -12.2 | -12.0 | -13.5 |
| Wewoka | 9,891 | 10,791 | 975 | 940 | -8.3 | -15.9 | -17.5 |
| Woodward | 94,058 | 103,963 | 10,271 | 9,722 | -9.5 | -8.1 | -12.3 |
| **Total Selected Cities** | 9,087,987 | 9,632,737 | 1,009,751 | 969,053 | -5.7 | -4.2 | -7.3 |

## ENID AND LAWTON MSAs

| Category | 9 Mos. '87 | 9 Mos. '86 | Sept. '87 | Percentage Change |  |
|---|---|---|---|---|---|
|  |  |  |  | 9 Mos. '87/'86 | Sept./Aug. '87 |
| **ENID MSA** |  |  |  |  |  |
| **Employment (Number)** |  |  |  |  |  |
| Labor Force | 29,728 | 31,500 | 29,375 | -5.6 | -1.1 |
| Total Employment | 27,536 | 29,000 | 27,800 | -5.0 | -0.3 |
| Unemployment Rate (%) | 7.3 | 7.9 | 5.4 | — | — |
| **Industrial Power Sales (000 Kwh)** | 342,574 | 352,235 | 39,859 | -2.8 | -1.7 |
| **PERMIT-AUTHORIZED CONSTRUCTION** |  |  |  |  |  |
| Residential—Single Family |  |  |  |  |  |
| Dollar Value ($000) | 1,273 | 1,460 | 275 | -12.8 | -15.4 |
| Number of Units | 14 | 21 | 3 | -33.3 | 0.0 |
| Residential—Multi Family |  |  |  |  |  |
| Dollar Value ($000) | 0 | 2,000 | 0 | — | 0.0 |
| Number of Units | 0 | 62 | 0 | — | 0.0 |
| Nonresidential |  |  |  |  |  |
| Commercial ($000) | 452 | 789 | 20 | -42.7 | — |
| Industrial ($000) | 1,194 | 1,587 | 0 | -24.8 | 0.0 |
| Institutional ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonbuilding |  |  |  |  |  |
| Streets and Highways ($000) | 264 | 193 | 264 | 37.1 | — |
| All Other Nonbuilding ($000) | 307 | 9 | 30 | E | — |
| Total Construction ($000) | 3,491 | 6,037 | 588 | -42.2 | 81.0 |
| **LAWTON MSA** |  |  |  |  |  |
| **Employment (Number)** |  |  |  |  |  |
| Labor Force | 47,725 | 48,500 | 47,525 | -1.6 | 0.2 |
| Total Employment | 45,297 | 46,000 | 45,300 | -1.5 | 0.5 |
| Unemployment Rate (%) | 5.1 | 5.0 | 4.7 | — | — |
| **Industrial Power Sales (000 Kwh)** | 147,066 | 152,556 | 18,973 | -3.6 | 12.8 |
| **PERMIT-AUTHORIZED CONSTRUCTION** |  |  |  |  |  |
| Residential—Single Family |  |  |  |  |  |
| Dollar Value ($000) | 14,606 | 17,215 | 820 | -15.2 | -12.4 |
| Number of Units | 228 | 273 | 14 | -16.5 | 7.7 |
| Residential—Multi Family |  |  |  |  |  |
| Dollar Value ($000) | 400 | 2,119 | 0 | -81.1 | 0.0 |
| Number of Units | 16 | 78 | 0 | -79.5 | 0.0 |
| Nonresidential |  |  |  |  |  |
| Commercial ($000) | 2,813 | 4,774 | 47 | -41.1 | -90.5 |
| Industrial ($000) | 20 | 1,108 | 0 | -98.2 | 0.0 |
| Institutional ($000) | 1,400 | 1,638 | 1,400 | -14.5 | — |
| Nonbuilding |  |  |  |  |  |
| Streets and Highways ($000) | 499 | 2,207 | 0 | -77.4 | 0.0 |
| All Other Nonbuilding ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Total Construction ($000) | 19,738 | 29,060 | 2,267 | -32.1 | 58.3 |

Note: Includes revisions.

E = exceeds 600 percent.

## MUSKOGEE MA

| Category | 9 Mos. '87 | 9 Mos. '86 | Sept. '87 | Percentage Change |  |
|---|---|---|---|---|---|
|  |  |  |  | 9 Mos. '87/'86 | Sept./Aug. '87 |
| **Employment (Number)** |  |  |  |  |  |
| Labor Force | 32,939 | 33,000 | 32,825 | -0.2 | 1.4 |
| Total Employment | 30,111 | 29,900 | 30,350 | 0.7 | 1.8 |
| Unemployment Rate (%) | 8.6 | 9.2 | 7.5 | — | — |
| **Industrial Power Sales (000 Kwh)** | 147,716 | 125,279 | 14,865 | 17.9 | -10.0 |
| **PERMIT-AUTHORIZED CONSTRUCTION** |  |  |  |  |  |
| Residential—Single Family |  |  |  |  |  |
| Dollar Value ($000) | 4,392 | 1,008 | 0 | 335.6 | — |
| Number of Units | 60 | 15 | 0 | 300.0 | — |
| Residential—Multi Family |  |  |  |  |  |
| Dollar Value ($000) | 1,427 | 2,167 | 0 | -34.1 | — |
| Number of Units | 35 | 40 | 0 | -12.5 | — |
| Nonresidential |  |  |  |  |  |
| Commercial ($000) | 8,354 | 253 | 0 | E | — |
| Industrial ($000) | 2,465 | 0 | 0 | — | 0.0 |
| Institutional ($000) | 1,523 | 1,629 | 0 | -6.5 | 0.0 |
| Nonbuilding |  |  |  |  |  |
| Streets and Highways ($000) | 79 | 319 | 0 | -75.4 | 0.0 |
| All Other Nonbuilding ($000) | 14 | 15 | 0 | -9.4 | 0.0 |
| Total Construction ($000) | 18,253 | 5,391 | 0 | 238.6 | — |

Note: Includes revisions.

E = Exceeds 600 percent.

## TULSA MSA

| Category | 9 Mos. '87 | 9 Mos. '86 | Sept. '87 | Percentage Change | |
|---|---|---|---|---|---|
| | | | | 9 Mos. '87/'86 | Sept./Aug. '87 |
| **Employment (Number)** | | | | | |
| Labor Force | 357,833 | 357,500 | 352,800 | 0.1 | -1.3 |
| Total Employment | 328,600 | 327,300 | 329,400 | 0.4 | -0.7 |
| Manufacturing | 49,678 | 51,589 | 49,600 | -3.7 | -0.4 |
| Mining | 17,067 | 17,822 | 17,100 | -4.2 | -1.2 |
| Government | 35,844 | 36,689 | 35,100 | -2.3 | 2.0 |
| Wholesale and Retail Trade | 73,578 | 72,633 | 73,700 | 1.3 | -0.4 |
| Unemployment Rate (%) | 8.2 | 8.4 | 6.6 | — | — |
| **Average Weekly Earnings** | | | | | |
| Manufacturing ($ Per Worker) | 433.97 | 414.78 | 463.94 | 4.6 | 3.8 |
| **Industrial Power Sales (000 Kwh)** | 1,570,369 | 1,498,025 | 183,645 | 4.8 | -5.3 |
| **Mortgage Loans Closed ($000,000)** | NA | NA | NA | — | — |
| **Bank Deposits ($000,000)**[a] | | | | | |
| Demand Deposits | 852 | 701 | 868 | 21.6 | 6.5 |
| Time and Savings Deposits | 2,323 | 2,026 | 2,293 | 14.7 | 1.4 |
| **Air Transportation** | | | | | |
| Passengers Enplaning (Number) | 1,061,851 | 1,031,364 | 104,606 | 3.0 | -17.7 |
| Passengers Deplaning (Number) | 1,076,944 | 1,030,898 | 105,522 | 4.5 | -21.1 |
| Freight (Tons) | 11,701 | 7,628 | 1,374 | 53.4 | 8.2 |
| **Water Transportation** | | | | | |
| Tulsa Port of Catoosa | | | | | |
| Tons In | 399,426 | 384,643 | 38,148 | 3.0 | -28.2 |
| Tons Out | 929,940 | 756,649 | 60,067 | 22.9 | -27.4 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 97,257 | 87,911 | 848 | 10.6 | -5.1 |
| Number of Units | 1,404 | 1,418 | 140 | -1.0 | -10.3 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 11,376 | 32,250 | 0 | -64.7 | 0.0 |
| Number of Units | 531 | 872 | 0 | -39.1 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 17,642 | 37,314 | 2,233 | -52.7 | 147.5 |
| Industrial ($000) | 5,967 | 7,167 | 241 | -16.7 | — |
| Institutional ($000) | 11,015 | 18,459 | 645 | -40.3 | 19.8 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 16,578 | 17,050 | 2,998 | -2.8 | -16.1 |
| All Other Nonbuilding ($000) | 3,566 | 4,848 | 88 | -26.4 | -79.4 |
| Total Construction | 163,402 | 204,999 | 16,052 | -20.3 | 1.4 |
| **General Business Index** | 87.1 | 85.8 | 86.0 | 1.5 | 0.1 |

Note: Includes revisions.

[a] Deposits in large commercial banks.

## OKLAHOMA CITY MSA

| | | | | Percentage Change | |
|---|---|---|---|---|---|
| Category | 9 Mos. '87 | 9 Mos. '86 | Sept. '87 | 9 Mos. '87/'86 | Sept./Aug. '87 |
| **Employment (Number)** | | | | | |
| Labor Force | 503,000 | 518,200 | 500,300 | -2.9 | -0.2 |
| Total Employment | 471,756 | 483,100 | 474,500 | -2.3 | 0.4 |
| Manufacturing | 48,667 | 50,100 | 48,800 | -2.9 | 0.0 |
| Mining | 11,722 | 14,378 | 11,700 | -18.5 | 0.0 |
| Government | 96,378 | 97,800 | 95,500 | -1.5 | 3.5 |
| Wholesale and Retail Trade | 97,422 | 104,144 | 97,600 | -6.5 | 0.2 |
| Unemployment Rate (%) | 6.2 | 6.8 | 5.2 | — | — |
| **Average Weekly Earnings** | | | | | |
| Manufacturing ($ Per Worker) | 447.39 | 434.97 | 459.41 | 2.8 | 1.7 |
| **Industrial Power Sales (000 Kwh)** | 910,744 | 926,363 | 108,780 | -1.7 | -0.1 |
| Mortgage Loans Closed ($000,000) | NA | NA | NA | — | — |
| **Bank Deposits ($000,000)**[a] | | | | | |
| Demand Deposits | 916 | 936 | 958 | -2.2 | 5.7 |
| Time and Savings Deposits | 1,707 | 2,185 | 1,352 | -21.8 | -10.3 |
| **Air Transportation** | | | | | |
| Passengers Enplaning (Number) | 1,444,848 | 1,110,078 | 111,654 | 3.1 | -21.6 |
| Passengers Deplaning (Number) | 1,157,704 | 1,129,341 | 111,734 | 2.5 | -26.2 |
| Freight Enplaned (Tons) | 4,461 | 5,737 | 551 | -22.2 | 23.5 |
| Freight Deplaned (Tons) | 7,293 | 8,417 | 893 | -13.4 | 19.2 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 119,990 | 146,042 | 12,572 | -17.8 | 9.2 |
| Number of Units | 1,916 | 2,438 | 184 | -21.4 | -0.5 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 1,344 | 26,727 | 0 | -95.0 | — |
| Number of Units | 59 | 925 | 0 | -93.6 | — |
| Nonresidential | | | | | |
| Commercial ($000) | 93,055 | 49,618 | 9,642 | 87.5 | -56.3 |
| Industrial ($000) | 3,277 | 3,961 | 0 | -17.3 | — |
| Institutional ($000) | 15,477 | 6,605 | 2,595 | 134.3 | -37.2 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 38,436 | 38,166 | 2,514 | 0.7 | -42.4 |
| All Other Nonbuilding ($000) | 4,261 | 2,803 | 475 | 52.0 | 5.3 |
| Total Construction ($000) | 275,839 | 273,922 | 27,797 | 0.7 | -1.4 |
| **General Business Index** | 88.7 | 85.1 | 90.8 | 4.3 | 0.1 |

Note: Includes revisions.

[a] Deposits in large commercial banks.

Sources for all tables: Local utilities companies; 10th Federal Reserve District Member Banks; Federal Home Loan Bank of Topeka; Oklahoma Employment Security Commission; United States Department of Commerce, Construction Statistics Division; Oklahoma Department of Transportation, *Progressive Report of the Transportation Director;* Center for Economic and Management Research, College of Business Administration, The University of Oklahoma. The data for all tables were compiled by Marjorie E. Earley, Statistician for CEMR and Brian Hickey, Research Assistant.

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# Business Highlights

**Neil J. Dikeman, Jr.**

In the latter half of 1986 and throughout the first half of 1987, many economists were forecasting the beginning of a turnaround for Oklahoma's economy during the latter half of this year. To date, there has been little indication that this reversal of the near four year decline in business activity in the State is occurring. Certainly there are some optimistic signs such as the continuing reduction in the rate of decline in construction activity, the diminution in the unemployment rate and the decrease in the number of bankruptcies. However, other sectors of the economy which, in 1986 appeared to be recovering such as retail trade and real personal income, have apparently lost much of the momentum they have had and are now lagging behind year ago figures.

## Personal Income:

One of the most important economic indicators—personal income—experienced fractional gains during both August and September and as a result, the total for the first nine months of the year is 1.5 percent ahead of the same period last year. However, when inflationary factors are removed, real personal income received by Oklahoman's during the period lags last year's total by 1.7 percent. The major reason for the slow increase in personal income (before removal of inflation) thus far this year is that increases in wage and salary, proprietors and property income have each risen at very modest rates with only wages and salaries paid to construction workers exceeding the rate of inflation. At the present rate of increase, personal income by year's end will total only $41.1 billion which will be 1.2 percent ahead of the total for 1986. After adjustment for inflation real personal income for the year then will fall 2 percent below last year's level.

## Retail Sales:

Retail sales for the first three quarters of the year clearly reflect the lag in personal income and are falling far short of earlier expectations. This is witnessed by the fact that the dollar volume of retail sales in Oklahoma before seasonal adjustment registered its second successive decline in September and the fourth in the past nine months. Unfortunately, in four of the five earlier months in which sales increased the gains were less than normal thus leaving total sales for the first nine months of the year 8.7 percent below the level of 1986 and the lowest at this time of the year since 1983.

The September drop in total sales was attributable to a 9.3 percent decline in sales of durable goods which was a greater decrease than was seasonally expected thus pushing the adjusted level of sales 13.3 percent below August. This loss was tempered slightly by the less than seasonal decline in sales of non-durable goods that resulted in a fractional increase in the adjusted total of sales in the soft goods lines. For the year to date sales of durable goods throughout the State were 10.7 percent less than for the same period last year.

The sharp September drop in sales of durable goods was the result of a near 13 percent decline in automobile sales and a decrease of 1.8 percent in furniture sales. These two major declines were augmented by a fractional loss in sales of hardware. It should be noted that there were some bright spots in the durable goods picture as appliance sales rose by 0.4 percent and lumber sales were 2.4 percent above the August totals.

The decline in non-durable goods sales between August and September was the largest of the year to date and was caused by decreases in all soft goods categories the largest of which were the 12 percent drop in sales of general merchandise stores and the near 12 percent downturn in restaurant sales. This latest decrease in sales of non-durable goods was the fifth in succession and the sixth out of the last nine months. As a result, sales of non-durable goods thus far this year remain 7.5 percent below the level at this time last year.

As has been the case throughout most of 1987, the decline in retail sales this year has been most acute in the smaller communities throughout the State. This is evidenced by the fact that while sales statewide are off last year's total by $1.1 billion or 8.7 percent, sales in the metropolitan areas are off by only $400 million or 4.6 percent. This means that the level of retail sales in the State's smaller communities are down by $700 million or 16.3 percent. Of even greater concern is the fact that sales in those communities which are outside the metropolitan areas are down by $600 million or 26.6 percent.

The pattern of retail sales to date indicates that if retail sales are to approach the record level set in 1986, sales during the last quarter of the year must approach $7 billion which will be $1.3 billion more than sales during the fourth quarter of 1986. Early indications are that sales during the remainder of the year will show a gain of only between 6 and 10 percent over the fourth quarter of last year which will bring the total for the year to about $16.8 billion or 3.5 percent less than the total for 1986. This will put the level at about the 1985 level which was second highest in history in terms of current dollars. However, when removing the effects of inflation, the level will conform closely to 1986 sales after adjustment for inflation.

## Bank Deposits:

Deposits in all depository institutions in the State also reflected the decline in real personal income as they dropped for the eighth successive month in September. But the problem with this indicator is more complex than with retail sales because most of the monthly decreases which have occurred are in savings deposits where deposits have been flowing out to investment programs paying higher interest rates than are available in the regulated depository institutions. It is entirely possible that recent fluctuations in the stock market will drive some of the deposits back into the normal pattern, if so, then the depository institutions may experience some meaningful increases in deposits during the last quarter. However, at the end of the third quarter, deposit levels in the regulated institutions were 2.4 percent below the total at this time in 1986. If significant amounts of deposits continue to be transferred into investments, it is probable that, by the end of the year, deposits will be off last year's level by as much as 3 percent.

## Crude Oil Production:

Crude oil production has continued to decline throughout the year so that by the end of September, production was 9.6 percent less than 1986 and promises to be even further behind by the end of the year. In fact, production for the year could drop to 131 million barrels which would represent a loss of about 4.4 percent during the year and the lowest level in at least the last three decades.

## Construction Activity:

As noted earlier, the construction industry appears to be strengthening as the dollar volume thus far this year was only 6.1 percent below the total for the same period last year. This compares favorably with the record in 1986 when the dollar volume of construction activity for the first nine months was 34.1 percent below the same period in 1985 which, in turn, was 27.9 percent below the total for the first three quarters of 1984. Much of the improvement in the construction picture this year has been due to a 30 percent increase in commercial building activity and to a fractional gain in street and highway building. The fact that the rate of decline in the value of single family dwellings has dropped to 4.7 percent this year also serves to offset the relatively large decreases in the construction of multifamily dwellings as well as industrial and institutional buildings. Since no appreciable increases in construction activity are expected during the last quarter because of the weather conditions normally associated with this period, it is likely that construction activity for the year will remain at between 6 and 7 percent below the total for 1986.

## Employment:

The employment picture in Oklahoma thus far in 1987 presents a mixed picture. The good news being that the unemployment rate in September dropped to 6 percent which reduced the average monthly unemployment rate for the year to 7.6 percent. Thus, the number of unemployed during the first 9 months of 1987 averaged 118,700 persons which was 10 percent less than the average of 131,900 who were unemployed during the same period last year. The bad news is that none of this decrease in unemployment was due to the addition of new jobs but to a decrease of nearly 31 thousand in the total labor force. Since this decrease was greater than the decline of 17 thousand jobs in average monthly employment, the unemployment rate was down despite the average monthly decline in employment.

Much of this year's decline in employment occurred in the agricultural sector where the average for the year to date is 19.3 percent below that of last year. This coupled with the decreases in average monthly employment of 3.3 percent in manufacturing, 4.8 percent in mining and 3.5 percent in contract construction were largely responsible for the overall drop of 1.2 percent in average monthly employment during the first three quarters this year from the same period last year. Given the history of employment in Oklahoma this year, it is not likely that the picture will change appreciably during the remainder of this year thus leaving employment about 1 to 1.5 percent below 1986.

## The General Business Index:

Despite the relatively pessimistic outlook evidenced by most of the indicators noted earlier, there is one piece of news that offers more than a glimmer of hope for improvement in Oklahoma's economy if not this year then for 1988. The good news is that changes in a number of other indicators such as the decrease in bankruptcies and increases in sales of manufactured goods, to mention only two, caused the General Business Index of Oklahoma rise for the seventh successive month in September. These increases, while generally modest, were sufficient to push the average of the Index for the first nine months up to 93.7 which is 3.2 percent higher than the 90.8 average attained during the same period last year. At the current rate of increase, the Index should reach an average of 94.0 by the end of the year which would mean a growth rate for the year of 3.2 percent over 1986.

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# *The Development of General Business Indexes for Oklahoma and Selected Areas*

***Craig Knutson***

General Business Indexes (GBIs) for the Oklahoma City Metropolitan Area, Tulsa Metropolitan Area, and the State of Oklahoma have been developed through the coordinated efforts of Southwestern Bell Telephone (SWBT) and the Center for Economic and Management Research (CEMR) at the University of Oklahoma. These Indexes are the first of five economic indicators under consideration for development: the other two would cover the Enid and Lawton area.

The Federal Government, through the United States Department of Commerce, releases a set of monthly indexes that track current and predicted economic activity for the United States. The indexes described herein were designed and tested to perform a like function, but for more specific geographic areas (i.e. Metropolitan Oklahoma City and Tulsa as well as the State of Oklahoma).

While data relating to an individual economic indicator or variable are available (e.g., metropolitan labor force, sales tax collections, etc.) aggregate knowledge of the direction our local economy is moving in its entirety may be unknown. The General Business Index, which is a collection of many local economic variables, is able to provide a numerical gauge of total economic activity in relative terms in that such an indicator covers the entire spectrum of the local economy.

This project was conceived out of a need for a reliable measure of current and expected economic activity. Local businessmen as well as outside developers and consultants have long wondered whether their planned investments in the metropolitan and state markets were and would be financially sound. Without an accurate barometer of current economic conditions, most economic forecasts for public and private users have been limited to assessments of the local economy based on a few economic variables.

The development of the General Business Indexes also serves another useful purpose, that of educating the general public and business community about the structure of their economy because a well *informed* populace is more likely to make sound economic decisions concerning their future. Planning for future investments requires an accurate assessment of both where the economy has been and where it is now. By understanding which variables impact our economy most heavily, consumer and business spending plans can be more reliably developed.

A composite historical view of the entire economy was deemed necessary before a more precise picture of our current and expected economic "well-being" could be expressed. The index gives us a statistically reliable account of not only where we've been and are right now, but also provides a means for developing a six month to one year view of where the economy is most likely to be in the future.

The three indexes consist of separate and distinct economic variables that are, for the most part, specific to their geographic boundaries. The variables for each of the indexes (listed below) were selected because they: 1) represent what was found to present a comprehensive cross-section of local economic and business cycle conditions; 2) are data that can be collected monthly and with minimal reporting delay; and 3) have proven to be historically and reliably accurate.

Construction of each three General Business Indexes was accomplished in three steps:

1. Detrending: The variables are analyzed for long term growth (trend). Any variations which are not part of simple growth patterns are passed on to step two...
2. Deseasonalization: The variations passed on from the previous step are examined for seasonality (variation peculiar to certain times of the year). Any variations which are not seasonal are assumed to be combinations of irregular variations ("one-time" dips or bumps and not part of the overall pattern) and cyclical variations (reflecting patterns of change

due to the rise and fall of general business activity)...

3. Index formation: Each of the variables (now reduced to combinations of cyclical and irregular variations) weighted in accordance with the extent to which it now reflects general business (cyclical) activity rather than irregular activity. Finally, these weighted cyclical indicators are added together to form the GBI, which is then scaled to an average of 100.0 and standard deviation of 10.0.

Forecasting models are currently being developed for each index but their reliability measures are the strongest at the 4-6 month point, thus restricting forecasts, for now, to a half-year period. Confidence intervals widen rapidly due to the historically short nature of the basic time series (90+ months). However, the statistical tests measuring forecastability as well as a measure of intuitive confidence in the projections will improve with the addition of data points.

As a complete month's set of data for all the variables are available, the indexes are updated and a new forecast is generated. This will provide the capability of monitoring the progress of each of the indexes and, at the same time, to assess the reliability of each Forecasting Model.

Current plans are to release the findings on a quarterly basis with a brief synposis of where and why the indexes are moving each quarter. These plans will also include a comparative analysis of index values over time, thus providing the reader with both a numeric and graphic depiction of economic change for metro Oklahoma City and Tulsa as well as the State of Oklahoma. Any questions concerning the general or technical aspects of these indexes may be directed to Craig Knutson (SWBT) at (405) 278-5519 or Warren Dickson (CEMR) at (405) 325-5873.

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*Craig Knutson is a Staff Economist for Southwestern Bell Telephone.*

**General Business Index - Oklahoma**

| Variables | Units of Measure | Source |
|---|---|---|
| Labor Force | Persons (Thousands) | Oklahoma Employment Security Commission (OESC) |
| Total Employment | Persons (Thousands) | OESC |
| Wage & Salary Employment | Persons (Thousands) | OESC |
| Unemployment Rate | Percentage | OESC |
| Manufacturing Employment | Persons (Thousands) | OESC |
| Services Employment | Persons (Thousands) | OESC |
| Manufacturing Hours (Weekly) | Hours | OESC |
| Sales Tax Collections (Total) | Dollars (Thousands) | Oklahoma Tax Commission (OTC) |
| Taxes Collected on the Sale of Building Materials | Dollars (Thousands) | OTC |
| Taxes Collected on the Sale of General Merchandise | Dollars (Thousands) | OTC |
| Taxes Collected on the Sale of Apparel | Dollars (Thousands) | OTC |
| Gross Production Tax: Oil and Gas | Dollars (Thousands) | OTC |
| Intent-to-Drill Permits | Permits | Oklahoma Corporation Commission (OCC) |
| Taxes Collected on the Sale of Oil Field Equipment | Dollars (Thousands) | OTC |
| Seismic Crew Activity (Nationwide) | Crews | Society of Exploration Geophysicists |
| Active Rotary Rigs | Rigs | Hughes Tool Company |
| Total Personal Income | Dollars (Millions) | Center for Economic and Management Research (CEMR) |
| Bankruptcies | Filings | U.S. Bankruptcy Courts: Western, Eastern & Northern Districts |
| Loans Closed at State Savings and Loans | Dollars (Millions) | Federal Home Loan Bank (FHLB) |

## General Business Index - Oklahoma (continued)

| Variables | Units of Measure | Source |
|---|---|---|
| Loans Committed at State Savings and Loans | Dollars (Millions) | FHLB |
| Net Savings at State Savings and Loans | Dollar (Millions) | FHLB |
| Total Net Deposits | Dollar (Millions) | FHLB |
| Residential Building Permits Activity | Units | CEMR |
| Non-Residential Building Permit Activity | Dollars (Thousands) | CEMR |
| Prices Received by Farmers — Beef | Dollars/100 Pounds | Oklahoma Department of Agriculture (ODA) |
| Prices Received by Farmers — Wheat | Dollars/Bushel | ODA |
| Bank Stock/Market Price | Index Value | Rubottom & Dudash |
| Full-Time State Government Employment | Persons | State Finance Department |
| State Government Expenditures (Payroll) | Dollars (Thousands) | State Finance Department |

## General Business Index - Oklahoma City

| Variables | Units of Measure | Source |
|---|---|---|
| Labor Force | Persons (Thousands) | Oklahoma Employment Security Commission (OESC) |
| Total Employment | Persons (Thousands) | OESC |
| Wage & Salary Employment | Persons (Thousands) | OESC |
| Unemployment Rate | Percentage | OESC |
| Manufacturing Employment | Persons (Thousands) | OESC |
| Manufacturing Hours (Weekly) | Hours | OESC |
| Help Wanted Index | Value | Oklahoma Publishing Co. (OPUBCO) |
| Office Vacancy Rate | Percentage | Coldwell Banker |
| Oklahoma City Municipal Employment | Persons | Oklahoma City Accounting Dept. |
| Oklahoma City Municipal Payroll | Dollars | Oklahoma City Accounting Dept. |
| Oklahoma City Bankclearings | Dollars (Thousands) | Oklahoma City Chamber of Commerce |
| Sales Tax Collections Returned to Oklahoma City | Dollars (Thousands) | Oklahoma Tax Commission (OTC) |
| Sales Tax Collections in Oklahoma County | Dollars (Thousands) | OTC |
| Oklahoma City Metropolitan Retail Trade | Dollars (Thousands) | Center for Economic and Management Research (CEMR) |
| Local Prime Interest Rate | Percentage | 1st Interstate Bank, Oklahoma City |
| Loans Closed at Metro Savings and Loans | Dollars (Millions) | Federal Home Loan Bank (FHLB) |
| Loans Committed at Metro Savings and Loans | Dollars (Millions) | FHLB |
| Net Deposits at Metro Savings and Loans | Dollars (Millions) | FHLB |

## General Business Index - Oklahoma City (continued)

| **Variables** | **Units of Measure** | **Source** |
|---|---|---|
| Homes Sold in Metro Oklahoma City | Units | Oklahoma City Metro Board of Realtors |
| Residential Building Permit Activity | Units | Management Information Systems, City of OKC (MIS) |
| Non-Residential Building Permit Activity | Square Footage | MIS |
| Taxes Collected on the Sale of Building Material (in Oklahoma County) | Dollars (Thousands) | OTC |
| Taxes Collected on the Sale of Oil Field Equipment (in Oklahoma County) | Dollars (Thousands) | OTC |
| Active Rotary Rigs | Rigs | Hughes Tool Company |
| Intent-to-Drill Permits | Permits | Oklahoma Corporation Commission (OCC) |
| Bankruptcies | Filings | U.S. Bankruptcy Court: Western District |

## General Business Index - Tulsa

| **Variables** | **Units of Measure** | **Source** |
|---|---|---|
| Labor Force | Persons (Thousands) | Oklahoma Employment Security Commission (OESC) |
| Wage & Salary Employment | Persons (Thousands) | OESC |
| Total Employment | Persons (Thousands) | OESC |
| Unemployment Rate | Percentage | OESC |
| Manufacturing Hours (Weekly) | Hours | OESC |
| Financial, Insurance & Real Estate Employment | Persons (Thousands) | OESC |
| Mining Employment | Persons (Thousands) | OESC |
| Manufacturing Employment | Persons (Thousands) | OESC |
| Construction Employment | Persons (Thousands) | OESC |
| Sales Tax Collections Returned to Tulsa | Dollars (Thousands) | Oklahoma Tax Commission (OTC) |
| Taxes Collected on the Sale of General Merchandise (Tulsa County) | Dollars (Thousands) | OTC |
| Taxes Collected on the Sale of Industrial Machinery (Tulsa County) | Dollars (Thousands) | OTC |
| Taxes Collected on the Sale of Oil Field Equipment (Tulsa County) | Dollars (Thousands) | OTC |
| Taxes Collected on the Sale of Building Materials (Tulsa County) | Dollars (Thousands) | OTC |
| Residential Building Permit Activity | Units | Center for Economic and Management Research (CEMR) |
| Non-Residential Building Permit Activity | Dollar Value (Thousands) | CEMR |
| Local Prime Interest Rate | Percentage | City Development, City of Tulsa |
| Total Bank Transactions | Dollars (Thousands) | Tulsa Clearinghouse |
| Loans Closed at Metro Savings and Loans | Dollars (Thousands) | Federal Home Loan Bank (FHLB) |

## General Business Index - Tulsa (continued)

| Variables | Units of Measure | Source |
|---|---|---|
| Loans Committed at Metro Savings and Loans | Dollars (Millions) | FHLB |
| Net Deposits at Metro Savings and Loans | Dollars (Millions) | FHLB |
| Tulsa Metropolitan Retail Trade | Dollars | CEMR |
| Active Rotary Rigs | Rigs | Hughes Tool Company |
| Intent-to-Drill Permits | Permits | Oklahoma Corporation Commission (OCC) |
| Bankruptcies | Filings | U.S. Bankruptcy Court: Norther District |
| Help Wanted Index | Value | City Development, City of Tulsa |

# Comparative Patterns of Work Values Among Clerical Employees in Oklahoma, the USA and Other Nations

George W. England

## Introduction

Work and working are an integral part of the human existence. Today, there is widespread recognition that the activity of working and the outcomes flowing from working are of fundamental significance to most individuals. In most industrialized societies, the average employed person spends approximately one-third of his/her waking hours in the activities that are known as "working." Additionally, the time one spends in preparation and training for work, seeking work, and planning for changed working situations suggests that work-related activities constitute a major utilization of time in the adult life. Related to this time-utilization feature of working is the fact that a majority of individuals in industrial societies derive the major part of their economic well-being (and for their family) from income and fringe benefits generated through their working activities.

Working and outcomes from working also provide non-financial or non-economic benefits to individuals. Were this not so, it would seem difficult to understand why 65 percent to 95 percent of individuals in national labor force samples in a variety of industrialized countries state that they would continue to work even if "they had enough money to live comfortably for the rest of their lives without working" (Vecchio, 1980; Warr, 1982; MOW International Research Team, 1987). This stated preference for working even when financial necessity is presumed not to be a significant consideration is undoubtedly related to the broader social value or significance individuals attach to working. This is demonstrated in studies such as Morse and Weiss (1955) in which most respondents indicated that "working gives them a feeling of being tied into the larger society, of having something to do, and of having a purpose in life."

Working situations and activities also may generate negative consequences, outcomes and personal states for individuals. Working is sometimes experienced as boring, dull or unchallenging at one end of the spectrum or as being excessively overloaded at the other end of the spectrum. The result can be frustration, dissatisfaction, stress, or inadequate person-job fit which can impact negatively on both mental and physical health. Cooper and Payne (1978, 1980) have summarized much of this relevant literature.

Working seems, then, to be of general significance to individuals because it occupies a great deal of their time, because it generates economic and socio-psychological benefits *and* costs and because it is so interrelated with other important life areas such as family, leisure, religion and community.

Work and working have been written about and studied in most of mankind's recorded history. While the purposes, focal points, and methods of such inquiry are certainly constrained by the zeitgeist of the time, the unrelenting subjective significance and value of working to individuals, to organizations and to societies are always evident. There does seem, however, to be an increased urgency to the study of working in the past two decades which stems from at least six interrelated conditions:

- increased international competition in the market place,
- increased rates of technological change and organizational and industrial sector restructuring,
- changes in labor force composition and educational qualifications
- trends in productivity and savings patterns in a number of economies which are viewed as disturbing,
- concern that elements of the "work ethic" seem to be changing in many countries in ways that are presumed to be undesirable,
- concern that working may not provide the type of meaning, social significance and satisfaction to individuals that was once

presumed to be the case.

This recent increased concern about work and working is not a single country phenomenon but seems relatively universal in the industrialized world although the focal points of concern differ somewhat in various countries.

It was out of this general mileau that the first comprehensive Meaning of Working (MOW) study jointly designed and conducted by behavioral scientists from advanced technological nations was described in the scientific literature in 1981 (MOW International Research Team, 1981). The primary data collection included nearly 15,000 respondents in eight countries and international comparative results are published in the book, *The Meaning of Working* (MOW International Research Team 1987).[1]

In the MOW project, we clearly recognized that the meaning of working is a broad and general topic analogous in many respects to other broad topics such as the meaning of life. These broad meanings seem predominantly experiential in nature, thus a logical approach for their study (in our case, the meaning of working) was to querry, observe and study those experiencing working. Common observation and research evidence also suggests that the meaning of working can vary tremendously from one person to the next, thus it seemed necessary to focus study on the individual and then to aggregate individual data to form relevant groups of concern such as occupational groups, age groups, gender groups and national labor forces. All of these considerations led us to the strategy of studying the meaning of working for representative labor force samples in nations using carefully developed, translated, pretested and standardized forms of questioning.

## Major Components in the Meaning of Working

The conceptual framework in the MOW project posited that the meaning of working should be defined and thus assessed in terms of three major components:

***Work Centrality*** **—** Defined as the degree of general importance that working has in the life of an individual at any given point in time. Work centrality was assessed by combining an absolute measure of the importance of working in one's life and a relative measure of the importance of working in one's life as compared to the importance of other life roles. The work centrality measurement attempts to answer the question: how central or important is the role of working in one's life?

***Work Goals*** **—** defined as the relative importance of eleven work goals and values which are sought or preferred by individuals in their working lives. The eleven work goals were:

- A lot of opportunity to learn new things
- Good interpersonal relations (supervisors, co-workers)
- Good opportunity for upgrading or promotion
- Convenient work hours
- A lot of variety
- Interesting work (work that you really like)
- Good job security
- A good match between your job requirements and your abilities and experience
- Good pay
- Good physical working conditions (such as light, temperature, cleanliness, low noise level)
- A lot of autonomy (you decide how to do your work)

***Societal Norms about Working*** **—** The MOW project focussed on two normative views toward work and working which capture much of the historical and contemporary discussion relevant to the meaning of working. The entitlement norm represents the underlying rights of individuals and the work related responsibilities of society and organizations toward all individuals. This norm includes the notion that *all members* of society are entitled to have work if they desire it; are entitled to interesting and meaningful work; are entitled to training when it is needed; and have the right to participate in work method decisions. All of these notions are entitlements or rights which come from standards of reasoning about property rights and the psychological contract as applied to the work setting.

The *obligation* norm represents the underlying duties of all individuals to organizations and to society with respect to working. This norm includes the notions that *everyone* has a duty to contribute to society by working; should save for the future from their work income; and should value their work whatever its nature. These notions are obligations or duties which come from standards of reasoning about internalized personal responsibility and social or institutional commitment.

Each individual studied can show a high, medium or low degree of agreement with each of the two norms. Additionally, an individual's responses to the two norms may be characterized as representing a balanced orientation (similar levels of agreement to the entitlement and the obligation norms), an entitlement orientation (greater agreement with the entitlement norm than with the obligation norm), or an obligation orientation (greater agreement with the obligation norm than with the entitlement norm).

It is primarily through the patterning of these three major components (work centrality, work goal preferences, and societal norms about working) that we attempt to portray the basic work values or work personality of the individual. By aggregating individuals, one can focus attention upon specific groups of interest such as occupations or national labor forces.

## Comparing Work Values

A reasonable sample (N = 176) of clerical workers in Oklahoma was studied during the same time period as the MOW study but for different purposes. The Oklahoma clerical worker study, however, included the major variables as defined and measured in the International MOW study. Thus it is now possible to utilize general MOW findings and comparative methodology to contrast work value patterns of Oklahoma clerical workers with those of clerical workers in the USA labor force and with those of clerical workers from a composite of six industrial nations.[2]

The strategy adopted for contrasting the value patterns of clerical workers in these different geographical settings encompasses two important decisions. The first decision is to treat the work values of an individual in a wholistic manner as opposed to viewing work values variable by variable (e.g., first look at work centrality, then work goals, then societal norms). While both approaches have utility, it seems clear that the totality of work values may be quite incomplete when we only examine single dimensions in isolation. Theoretically, the major work value variables do not operate independently within the individual; rather they form some pattern. The utilization of major work value patterns moves toward this wholistic view and permits more realistic comparisons among individuals or aggregations of individuals (i.e., clerical employees). The second important decision is to use general work value patterns and frameworks as developed on the basis of total labor forces in several countries when contrasting the different clerical samples. This decision allows one to utilize work value patterns and their correlates which have been shown to be stable and descriptively valid across a broad range of national samples.

The eight major patterns of work values which were developed in the MOW project and which are used in contrasting Oklahoma clerical workers with USA clerical workers and the six-country composite of clerical workers were developed through cluster analysis and discriminant analysis of the major variables previously identified. These procedures group together individuals who have similar work values to form homogeneous groups which differ as much as possible from other work values groups. For present purposes, these groups can be described briefly as follows.[3]

Pattern A workers have the second lowest work centrality scores among the eight groups. Their economic values are considerably lower than their relatively moderate expressive values.[4] Their obligation norms are the lowest among the eight patterns and considerably lower than their relatively high entitlement norms. These workers do not value working very highly nor do they have a normative orientation toward duty to employers or society. Additionally they do not value highly economic goals in their work. These workers are not highly work motivated. They tend to place a high value on family, leisure and interpersonal contacts relative to the value they place on work. They have the third highest percentage of workers among the eight patterns who would quit working if they were financially able (20 percent versus 15 percent for the total group). They also are relatively dissatisfied with their occupations. Nearly half (versus an overall average of 40 percent) would only continue working (given a choice) if at another occupation. Forty-six (versus an overall average of 40) percent indicate that they would choose another occupation if they could. The MOW pattern and work characteristics suggests that these people are "apathetic" about work as a significant life activity and this is the label used to describe them. They exchange a below average amount of effort (39 hours per week versus an overall average of 43), the lowest among the eight groups, for social interaction and a low wage.

The three salient characteristics for pattern B workers are their low work centrality, low expressive values and relatively high obligation norms. The work centrality score is the lowest and expressive values are the third lowest of the eight MOW patterns. These workers agree slightly more with statements concerned with their rights than statements concerned with their duties. However, the obligation score is moderately above the grand mean and these workers have the third highest obligation score among the eight patterns. What characterizes these workers is that they exchange a modest amount of their time for a near average wage. Their MOW pattern of low work centrality and low expressive values, and above average norm of obligation suggests that these people are "alienated" from their own low quality work and rather value other facets of their lives.

Pattern C workers have the highest economic work goals and the lowest expressive work goals among the MOW patterns. Additionally, their entitlement norms are approximately one standard deviation higher than their obligation norms. However, the entitlement and obligation scores are both relatively low in this MOW pattern, so the normative imbalance is between two relatively weak norms. Since the dominant feature of this MOW pattern is the relative levels and the imbalance between the two work goal dimensions we call these people "economic" workers. These workers have a relatively low level of occupational satisfaction: forty-six (versus 40) percent would choose a different occupation. A relatively high percentage (23 versus 15 percent) would quit working if they were financially able to do so. In summary, these workers exchange a near average level of effort (42 hours per week versus 43 hours) which is directed by others for a below average wage.

Pattern D workers have the second highest economic work goals among the eight groups. Additionally, both their obligation norms *and* their entitlement norms are the highest among the eight profiles. These two norms also are balanced or approximately equal. The features of high economic work goals, and high and balanced work norms especially characterizes this MOW pattern in comparison to the other patterns. For these reasons we have labeled these people as "high rights and duty economic" workers. These workers indicate near average occupational satisfaction. The percentage who would stop working if they were able is similar to the general average. In summary, these workers exchange a high and balanced normative orientation for an above average income and a feeling of belonging.

Workers in pattern E have the fifth lowest economic goals scores. Two other salient features center around their norms. Their entitlement norms are the lowest among the eight patterns. Their obligation norms are the third lowest among the patterns. Thus, workers with this pattern have weak norms regarding both rights and duties, although duties are endorsed somewhat more than rights. These workers have a particularly complex work values pattern. In addition to the three major features mentioned, they have a moderate level of work centrality and their expressive values, though higher than their economic values, are relatively moderate. These workers seem to exchange skill, knowledge and responsibility for a mixture of economic, expressive and status-prestige rewards. Features of their MOW pattern, their high educational attainment and their high job quality suggests that these people are best labeled "techno-bureaucratic" workers.

Pattern F workers have the third

highest work centrality scores among the eight patterns. Other major features of this profile are the large imbalance between the expressive and economic goals, and the relatively high obligation norms score. The economic work goals score is the next to lowest among the eight patterns and is about 2 standard deviations below that of the expressive goals. The obligation score is the second highest among the eight MOW patterns. Thus non-economic goals and high duty norms characterize this profile. For these reasons we call these respondents "duty oriented social contribution" workers. These workers define the concept "work" strongly as service to society. The occupational satisfaction of these workers is very high. Sixty-seven (versus 60) percent would choose the same occupation and two thirds of them would recommend their occupation to their children. Only seven percent indicate that they would stop working if financially able to do so, while 59 percent would continue to work in the same job. This later percentage is the highest among the eight MOW patterns. In summa~~ry, the~~ workers with this MOW pattern seem to exchange skill, knowledge and responsibility for socially generated satisfaction and average income.

Pattern G workers have the second highest average work centrality score among the eight MOW patterns. Another notable feature of this pattern is the large imbalance between the work goal dimensions. There is about a two standard deviation difference between expressive work goals and economic work goals. Expressive work goals and work being central to one's life particularly characterize this profile. For these reasons we have called these respondents "work centered expressive" workers. These workers have the highest occupational satisfaction among the eight groups. Seventy-four (versus 60) percent would choose their occupation again, while sixty-nine (versus 62) percent would recommend their occupation to their children. These workers have a high commitment to work as they experience it, but not necessarily to *any* kind of work. Only 4 percent (versus 15 percent) would quit working if they were financially able, while 41 percent would choose a different job. In summary, workers with this MOW profile appear to exchange value adding mental effort for intrinsic satisfaction and above average income.

The results for pattern H indicate high work centrality, and relatively high and balanced economic and expressive work goals. This MOW pattern has the highest average work centrality score among the eight groups. The economic and expressive work goal dimensions are the third and second highest respectively, and differ from each other only slightly. Based on these findings we have labeled this a "work centered and balanced work goals" MOW pattern. This pattern is the most evenly distributed of the eight across occupational categories. Even given this wide distribution across occupational categories, the monthly net income of these workers is the highest among the eight groups. In terms of work involvement these workers have the longest average work week of any profile (47 versus 43 hours). Workers with this pattern have the highest level of work centrality among the eight groups. Consistent with this finding and their high behavioral involvement, we observe that they have a high level of commitment to their present work. Only 8 percent (versus 15 percent) would stop working if they were financially able to do. Additionally, 65 percent (versus 60 percent) would continue working in the same occupation. In summary, the MOW pattern and work characteristics of this group of workers suggests that they exchange mental and/or physical effort for intrinsic satisfaction and high income.

This description of MOW patterns points out the wide diversity in work value orientations of national labor force samples in these six advanced industrial countries. The patterns broaden the scope of descriptive understanding of the cognitive and affective frameworks used by workers in responding to or actively seeking to influence their work environments. The eight clearly identifiable and contrasting MOW patterns provide examples of the richness of work value orientations. They suggest that overemphasis on any single work values pattern is likely to inhibit discussion, inquiry and practical understanding of working as a major life activity. They also provide a useful way to contrast Oklahoma results with those of the nation and a variety of countries. It is to these contrasts that we now turn.

### Work Value Comparison Results — Clerical Employees

Although we do not have sufficient Oklahoma data to compare the total Oklahoma labor force with that of the USA and other countries, we can make reasonable comparisons among clerical employees. Table 1 shows the percentage distribution of clerical workers who are classified into the eight major work value patterns for Oklahoma, for the USA and for a composite of six industrial countries. Thus, we can compare work values in our state with the nation and with a set of other countries for this one labor force segment.

It is clear from Table 1 that clerical employees in all three groups (state, nation, and international composite) are made up of individuals having a broad range of work values in terms of the eight major patterns. All three groupings contain one or two patterns with percentage representation of 5 percent or less but these are not always the same patterns. Each of the groups also contains three patterns which include about two-thirds of the individuals in the group. These three large patterns (in terms of inclusion) are the same ones for clerical workers in Oklahoma and the USA. For the composite international sample, only two patterns are the same as those found in Oklahoma and the USA. Thus it is clear that there are both similarities and differences in pattern distributions among the three groups.

For evaluative purposes, it seems most useful to focus on the content of the patterns as well as their frequency. Both Apathetic and Alienated workers (Patterns A and B) represent a negative set of work values whether judged from the vantage point of the individual or of the employing organization. Working is not a very important life role for those described by these two patterns; these individuals are not occupationally satisfied and they don't contribute a great deal of effort to their work. Twenty-three percent of Oklahoma clerical workers are found among these two categories as contrasted with 40 percent among USA clerical

## TABLE 1

### Percentage Distribution of Eight Major Work Value Patterns for Clerical Workers in Oklahoma, in the USA, and in a Composite of Six Countries

| | Pattern | Percentage Distribution<br>Six Countries (N = 997) | <br>USA (N = 160) | <br>Oklahoma (N = 176) |
|---|---|---|---|---|
| A | Apathetic Workers | 25 | 31 | 21 |
| B | Alienated Workers | 19 | 9 | 2 |
| C | Economic Workers | 17 | 21 | 37 |
| D | High Rights and Duties Economic Workers | 5 | 6 | 11 |
| E | Techno-bureaucratic Workers | 4 | 8 | 8 |
| F | Duty Oriented Social-Contribution Workers | 9 | 8 | 6 |
| G | Work Centered Expressive Workers | 8 | 2 | 0[a] |
| H | Work Centered and Balanced Work Goals Workers | 14 | 15 | 14 |

[a] Less than .5 percent.

workers and 44 percent among the international clerical sample. Oklahoma is different in this respect and the difference is clearly an advantage.

The other major difference between the Oklahoma sample and those of the other two groups concerns Patterns C and D which share the common theme of economic orientation. In both of these patterns, economic values are significantly more valued than are expressive values. People in these patterns are much more concerned with their pay and job security than they are with how interesting their work is, the amount of autonomy they have and the extent to which their skills are utilized in work. Forty eight percent of Oklahoma clerical workers are found in Patterns C and D while the comparable percentages are 27 percent among USA clerical workers and 22 percent among the international group. Oklahoma has nearly two times the proportion of clericals in these two patterns as does the nation or the international group. Evaluation of this result is complicated and seems not be be either clearly favorable or unfavorable. Economic motivation is often viewed as the most powerful of all work motivation forces and in this sense Oklahoma clerical workers seem to present a potential advantage. The qualifier "potential" is used because these patterns of work values would seem to require some reasonable degree of actual economic reward for them to be effective motivators over any sustained period. On the negative side, it is often argued that over-reliance on economic motivation (perhaps more correctly viewed as under-emphasis on expressive motivation in the Oklahoma results) does not permit the utilization of a wide range of motivational forces. If such a high proportion of workers (nearly half for Oklahoma) seem to have primarily economic work values, it will be difficult to effectively use a wide range of work motivation forces. Finally, it should be noted the Patterns F, G, and H show a moderate under-representation by Oklahoma clerical workers in contrast to these in the USA and the international sample. In many respects, these three patterns would be classified as showing positive work values whether viewed from the perspective of the individual or of the employing organization. They generally have relatively high levels of work centrality, high occupational satisfaction and high levels of work involvement. Here, Oklahoma has the lowest percentage inclusion.

On balance, the work values picture as represented by Oklahoma clerical workers seems moderately favorable. It would seem of considerable value to extend this type of research to the total labor force in Oklahoma.

## Notes

[1] The eight countries participating in the MOW project were Belgium, Britain, Federal Republic of Germany, Israel, Japan, Netherlands, United States of America, and Yugoslavia.

[2] The six countries which could be included in the clerical worker comparisons are Belgium, Germany (West), Israel, Japan, the Netherlands, and the USA.

[3] See England and Whitely, 1987 for procedural and more complete descriptions. These descriptions are abstracted from this source.

[4] The economic and expressive work goal dimensions (as identified by factor analysis) are utilized in the pattern analyses. The economic index is based on the responses of individuals to the importance of good pay and good job security as personal work goals. The expressive index is based on the responses of individuals to the importance of interesting work, skill utilization and autonomy as personal work goals. Responses to each set of goals were averaged to form the two dimension scores.

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# A Shift-Share Analysis of the Manufacturing Sectors of Oklahoma and Surrounding States

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## Introduction

This article reviews national manufacturing growth patterns and compares these patterns to what has happened in Oklahoma and other states within the region. Through the use of shift-share analysis, changes in employment over time are decomposed by industry and by state into three components: (1) that part resulting from overall national economic growth; (2) that part associated with national differences in industry growth rates; and (3) that part ascribed to the growth (or decline) of an industry in a state vis à vis the nation.

There are several reasons for examining these components of change. Foremost among these reasons is the concern that the State of Oklahoma has been drawn off its long-term growth path. Between 1974 and 1982, there was a massive shift in state resources towards the energy sector. During this period, the state enjoyed high rates of economic expansion, rising rents and wage levels, and low unemployment rates that, in all likelihood, discouraged more diverse types of businesses from locating in the state. Because many of Oklahoma's neighbors are less energy intensive, the ways in which they were able to grow during this period could point the way towards opportunities that could now be pursued in this state. In addition, examination of changing manufacturing employment patterns in the national economy, which is at the heart of shift-share analysis, helps provide a better understanding of where the possibilities for expansion lie. Finally, by conducting shift-share analysis, it is possible to ascertain where Oklahoma's comparative advantages are strongest.

### National Manufacturing Trends

At the national level, manufacturing has not been a growth sector in recent years. The relative size of this sector has deteriorated considerably since 1960, when manufacturing employment represented 31 percent of total nonagricultural employment.[1] Today it is only about 19 percent. Moreover, since 1979, manufacturing has been losing ground in absolute terms as well. Currently, manufacturing employment is 1.8 million workers lower than the 1979 annual average of 21 million workers.[2]

The losses in manufacturing in the 1980s have two primary sources. First, there was a deep recession in 1981-1982, from which the U.S. economy is presently recovering. Second, the U.S. economy has been plagued with international trade problems, manifest in a high exchange value of the dollar. This has made U.S. goods relatively more expensive to foreigners and foreign goods relatively cheaper in the U.S. and has culminated in the massive U.S. trade deficits this country is currently experiencing.

The pace and direction of growth in total nonagricultural employment stands in sharp contrast to national manufacturing trends. Nonagricultural employment rose by 12.7 million workers, or 16 percent, from 1974 to 1981. Since 1981, it has risen an additional 8.8 million, nearly a 10 percentage point gain. In contrast, manufacturing employment has dropped about one million, roughly 5 percent. That the nation is increasingly becoming a service driven economy is readily apparent from these figures.

### Manufacturing Trends in the Region

The region under study consists of Oklahoma and nearby states. Most of these states share borders, albeit sometimes not very long borders, with Oklahoma; these include Arkansas, Colorado, Kansas, Missouri, New Mexico, and Texas. Louisiana is added to the list because of its many similarities to Oklahoma.

The relative levels of manufacturing employment and the trends since 1970 vary considerably across the eight states. Arkansas has a very high percentage of its nonagricultural workforce in manufacturing, and its sector's relative share has remained high in comparison to the sizable decline in share of manufacturing nationally. Missouri's share approximates the national level, while Kansas (which is particularly high in its durable goods component) follows fairly closely behind. With recent shares well below the national level (in the 14 percent range), the states of Colorado, Oklahoma, and Texas form a third group. Louisiana and New Mexico fall into a fourth group, with even lower shares of nonagricultural employment in manufacturing.

For all eight states, the trend in the share of employment in manufacturing has been distinctly downward. However, despite this decline in relative size, the manufacturing sectors of Arkansas, Colorado, and New Mexico gained employment between 1980 and 1986. This was counter to the national trend.

## Shift-Share Analysis

To better understand these patterns, this study uses shift-share analysis to examine for each state in the region employment changes in all manufacturing industries between the years 1974 and 1981.[3] Shift-share analysis is a technique which decomposes a change in a region's employment (or output) into three factors: national growth; industry mix; and regional shift.[4]

Algebraically,

$$E'_{is} - E_{is} = r_n E_{is} + (r_{in} - r_n)E_{is} + (r_{is} - r_{in})E_{is}, \qquad (1)$$

where $E'_{is}$ and $E_{is}$ refer to employment in industry i in state s in the ending and beginning years of analysis, $r_n$ is the growth rate of all manufacturing nationally, $r_{in}$ is the growth rate for industry i nationally, and $r_{is}$ is the growth rate for industry i in state s.

A particular manufacturing industry in a state can expand or decline as a consequence of growth or decline in overall economic activity. This national growth component is the first term on the right-hand side of equation (1) and is determined by multiplying the national growth rate for all manufacturing ($r_n$) by the initial employment level of specific manufacturing industry i in each state ($E_{is}$). Thus, the national growth component measures the employment change that would have occurred in a state if employment in each industry had grown at the national average growth rate.

Growth or decline can also occur in a given industry in a state because that industry is gaining or losing ground, on a national level, relative to other manufacturing industries. The difference between a specific industry's national rate of growth and the national rate of growth in all manufacturing industries captures the extent of second component changes. This industry mix component is the middle term of equation (1). When this is summed across all industries, it reflects whether the state is specializing in high, average, or low growth industries.

The third team of equation (1) is the regional shift component. It measures the difference between the rate of growth of an industry in a state and the national growth rate in that industry. Therefore, if an industry is growing more rapidly in a state than it is in the nation, the regional shift component indicates a favorable shift towards the state.

In summary, shift-share analysis provides a way of determining the extent to which employment changes experienced by a state over time are associated with each of three factors: general national growth; the state's mix of industries; and geographic industry shifts. The shift-share analysis conducted for this article covers the period from 1974 through 1981. The year 1974 coincides with the beginning of the energy crisis and, therefore, serves as a useful benchmark upon which to assess the divergence from Oklahoma's long-term growth path. The year 1981 was selected as the terminal year of analysis because of the problems the U.S. manufacturing sector has been experiencing in recent years. By using 1981 as a terminal year, it is possible to abstract somewhat from the difficulties experienced on the national scene.

### National Growth Component

In both 1974 and 1981, the national manufacturing employment levels were approximately equal (20.046 vs. 20.173 million workers). Consequently, the national growth component of change is negligible for all manufacturing industries and all states. In other words, during the 1974 to 1981 period, virtually all the employment change in the region was associated with either changes in industry mix or with shifts toward the region.

### Industry Mix Component

There have been a number of rather radical shifts in manufacturing employment patterns during both the 1974 to 1981 period and the period since 1981. As discussed earlier, these shifts are captured by the industry mix component. In calculating this component, differences in industrial rates of growth are measured at national levels and are therefore identical for all states. The industry losers during the analysis period were, in order of employment loss, as follows: primary metal industries (-222,000 workers); miscellaneous durable goods (-214,000); textile mill products (-166,000) and apparel and other textile products (-104,000). On the other hand, the winners were nonelectrical machinery (+289,000); instruments and related products (+207,000); and printing and publishing (+154,000). Fabricated metal products, transportation equipment, electrical machinery, chemicals, and rubber and plastics scored decent gains, but with changes under the 100,000 mark.

The principal changes in industrial realignment of employment can be portrayed in Figure 1, where (+ +) indicates employment growth exceeding 100,000 workers, (+) indicates a growth in employment ranging from 40,000 to 100,000 workers, (0) stands for a change in employment ranging between plus and minus 40,000 workers, (-) designates employment losses between 40,000 and 100,000, and (--) specifies those manufacturing industries with employment losses in excess of 100,000. States which in 1974 had a higher-than-average proportion of rapid growth industries included Oklahoma, Missouri, and Kansas.[5] At least part of the total growth in employment in these states during the 1974-1981 period can be attributed to their favorable mix of industries.

### Regional Shift Component

The regional shift component reflects the difference between state

## FIGURE 1

| -- | + + |
|---|---|
| Primary metal industries<br>Miscellaneous durable goods<br>Textile mill products<br>Apparel | Machinery, except electrical<br>Instruments<br>Printing and publishing |
| - | + |
| Furniture and fixtures<br>Stone, clay and glass<br>Leather products | Lumber and wood products<br>Fabricated metal products<br>Electrical machinery<br>Transportation equipment<br>Chemical products<br>Rubber and plastic products |
| 0 | |
| Food and kindred products<br>Paper and allied products | Tobacco manufactures<br>Petroleum and coal products |

and national growth in a specific industry. It therefore measures whether an industry is growing more or less rapidly in a state than in the nation. By multiplying this difference in growth rates by a state's initial employment level, it is possible to determine how much of a state's growth in a particular industry can be attributed to regional shift. The remainder of this section examines how the individual states in the region fared in manufacturing employment gains during the 1974-1981 period, with emphasis on the regional shift component of this growth.

***Oklahoma.*** Industry detail on manufacturing employment varies by state. Oftentimes industries that appear separately in national totals are aggregated at the state level. A moderately detailed breakout of manufacturing employment is available for Oklahoma. Review of these data indicates that Oklahoma grew substantially during the analysis period, in ways commensurate with national patterns. Between 1974 and 1981, Oklahoma's manufacturing employment rose from 157,000 to 200,000, with substantial gains occurring in the nonelectrical machinery, transportation equipment, and fabricated metal products industries. The printing and publishing and rubber and plastics industries experienced lesser gains.

In all these industries, Oklahoma registered positive regional shifts, indicating that in these particular industries the state received more than its proportionate share of the gains achieved nationally. These were very good years for Oklahoma manufacturing growth. Of course, some of this growth was energy related. Nevertheless, Oklahoma has increased its share of such industries as printing and publishing and rubber and plastics, neither of which are highly related to energy. Yet it remains true for Oklahoma, as for many other states, that in the 1980s most and sometimes all of the gains in manufacturing employment have been taken back.

Manufacturing industries in Oklahoma with significant employment changes in the 1974-1981 period include the following:

**Selected Manufacturing Industries of Oklahoma**

| Industry | 1981 Employment (in thousands) | Total 1974-81 Change (in thousands) | Regional Shift Component (in thousands) |
|---|---|---|---|
| Nonelectrical machinery | 44.7 | 18.9 | 15.5 |
| Transportation equipment | 21.3 | 9.0 | 8.5 |
| Fabricated metal products | 25.4 | 6.6 | 5.5 |
| Rubber & plastics | 11.9 | 3.1 | 2.3 |
| Printing & publishing | 11.3 | 2.1 | .8 |
| Apparel & other textile products | 10.7 | -2.6 | -1.5 |

It is apparent that most of these industrial employment changes were dominated by regional shifts favorable to the area. Exceptions include the printing and publishing industry and the apparel and related products industry.

***Arkansas.*** Manufacturing in Arkansas is somewhat of an anomaly. The state enjoys one of the highest relative shares of nonagricultural employment in manufacturing in the nation, but generally ranks low in such measures of economic well-being as income per capita. It is fairly clear from even the most cursory examination that much of Arkansas' manufacturing employment is in relatively low value-added manufacturing facilities.

The manufacturing component in Arkansas has been fairly stable in both absolute and percentage terms. In the 1974-1981 analysis period, manufacturing employment increased by only 6,000 workers. These gains were largely in the nondurable goods sector, especially the food and kindred products, apparel and other textile products, and printing and publishing industries. Although the nondurable goods industries have been declining in importance nationally, Arkansas has experienced sizable gains. On the other hand, in Arkansas' durable goods sector, employment losses were recorded during the analysis period. Most notably, the industry engaged in manufacturing instruments and related products lost 4,000 workers. This industry was one of the big winners nationally, registering over a 200,000 employment gain.

The Arkansas experience suggests that gains may be achieved by acquiring a larger share of declining industries. The food processing industry is one example. Despite a much lower base of nonagricultural employment, Arkansas employs more than twice the number of workers in this industry as does Oklahoma. Arkansas' food processing industry has achieved substantial gains in recent years, and there may be opportunities for Oklahoma in this domain.

Furthermore, there is reason to be envious of the relative stability of Arkansas' manufacturing base. However, the poor performance that Arkansas has had in several of the more high-tech type durable goods industries is not something that Oklahoma would wish to mimic. Thus, the Arkansas experience is anomalous, indeed. Further study is necessary, but it seems that added attention to nondurable goods industries may be warranted in Oklahoma.

Manufacturing industries in Arkansas with major employment changes in the 1974-1981 period include the following:

**Selected Manufacturing Industries of Arkansas**

| Industry | 1981 Employment (in thousands) | Total 1974-81 Change (in thousands) | Regional Shift Component (in thousands) |
|---|---|---|---|
| Food & kindred products | 34.5 | 7.4 | 8.0 |
| Nonelectrical machinery | 14.4 | 3.3 | 1.8 |
| Lumber & wood products | 20.4 | -3.1 | -4.7 |
| Furniture & fixtures | 9.7 | -3.6 | -2.3 |
| Textile mill products | 12.2 | -4.0 | -1.3 |
| Instruments & related products | 10.7 | -4.1 | -9.1 |

Arkansas has experienced a mixed record of gains and losses during the analysis period. The biggest gainer was food and kindred products, where the regional shift exceeded the total employment changes. This indicates a greater share of an industry that is declining nationally. With the exception of textile mill products, the regional shift component tended to dominate.

***Colorado.*** In Colorado, manufacturing employment rose about 40,000 workers during the 1974-1981 period. Roughly eighty percent of this increase occurred in the higher paying durable goods industries, in particular the industries involved in the production of electrical and nonelectrical machinery, transportation equipment, and miscellaneous durable goods. Gains in printing and publishing dominated the nondurable goods component. This employment growth has continued into the 1980s. Colorado is one of the few states in the region to have experienced increases in manufacturing employment between 1980 and 1986.

Manufacturing industries with significant employment changes in the 1974-1981 period include the following:

**Selected Manufacturing Industries of Colorado**

| Industry | 1981 Employment (in thousands) | Total 1974-81 Change (in thousands) | Regional Shift Component (in thousands) |
|---|---|---|---|
| Nonelectrical machinery | 25.8 | 11.6 | 9.7 |
| Miscellaneous durable goods | 28.1 | 9.4 | 9.5 |
| Electrical and electronic equipment | 16.9 | 6.1 | 5.7 |
| Printing & publishing | 17.6 | 5.4 | 3.7 |
| Transportation equipment | 13.9 | 4.1 | 3.7 |

These data and calculations indicate the depth and breadth of Colorado's manufacturing growth in the analysis period and suggest that much of that growth has been accomplished through favorable regional shifts. Good things seem to be happening with manufacturing in Colorado, even though the pace has been slow. This state is a candidate for additional study, particularly because strong growth has occurred in the unspecified miscellaneous durable goods category. The exact nature of that growth needs to be better understood.

***Kansas.*** Manufacturing employment in Kansas grew at a respectable rate between 1974 and 1981, but these gains were highly concentrated in transportation equipment, printing and publishing, and chemicals. Losses were marginal in this period and took place in expected industries, given national changes in industry mix. However, since 1981, manufacturing employment losses have been fairly substantial. In general, these losses have been concentrated in the durable goods industries.

The concentrated nature of manufacturing growth in Kansas leaves little to be learned from this state's experience. It is interesting to note, however, that despite high levels of employment concentration in the transportation equipment industry (better than one-fourth of the state's manufacturing employment is in this industry), Kansas has been steadily increasing its share of this industry.

Manufacturing industries in Kansas with significant employment changes in the 1974-1981 period are given in the table, "Selected Manufacturing Industries of Kansas," on the following page. Out of a total net manufacturing employment change of 19,400, approximately 12,800 were associated with employment growth in the transportation equipment industry. Much of the growth in this industry was due to regional shifts, rather than to national growth or industry mix effects. This underscores the vulnerability of the Kansas manufacturing base to a national recession or a slowdown in defense spending.

As the figures above indicate, Kansas is another state in the region showing a favorable change in printing and publishing employment. Over the 1974-1981 period, changes in this industry tended to be composed of larger shares of national, as opposed to regional shift, influences. On the other hand, changes in Kansas' chemical industry were largely attributable to regional shifts.

***Louisiana.*** Between 1974 and 1981, this state scored respectable employment gains. Principal gains were achieved in transportation equipment, nonelectrical machinery, other durable goods, chemicals, and petroleum and coal products. Louisiana did not fare well in industries that were doing poorly nationally (a

### Selected Manufacturing Industries of Kansas

| Industry | 1981 Employment (in thousands) | Total 1974-81 Change (in thousands) | Regional Shift Component (in thousands) |
|---|---|---|---|
| Transportation equipment | 50.1 | 12.8 | 11.3 |
| Printing & publishing | 17.3 | 2.8 | .8 |
| Chemicals & allied products | 8.8 | 2.0 | 1.7 |

good sign), and its gains were distributed fairly broadly.

However, Louisiana is a state, like Oklahoma, with a relatively high degree of energy-related manufacturing. Therefore, it is not surprising that the picture changed after 1981. Since that time, manufacturing employment has declined quite steeply in Louisiana, from 222,000 in 1981 to 168,000 today. As a consequence, Louisiana is currently experiencing a lower level of manufacturing employment than it had in 1970. Only one other state in the eight state region has the dubious distinction of duplicating this experience (Missouri).

Both the timing of Louisiana's decline in manufacturing employment and the rapid rate at which it occurred suggest that much of the pre-1981 growth in Louisiana was energy-related. Thus, even though there is the appearance of a degree of balance in manufacturing growth in Louisiana (with concomitant reductions in risk to economic adversity), there is little reality to it.

Manufacturing industries in Louisiana with significant employment changes in the 1974-1981 period include the following:

### Selected Manufacturing Industries of Louisiana

| Industry | 1981 Employment (in thousands) | Total 1974-81 Change (in thousands) | Regional Shift Component (in thousands) |
|---|---|---|---|
| Transportation equipment | 30.4 | 10.2 | 9.4 |
| Nonelectrical machinery | 15.8 | 8.1 | 7.1 |
| Chemicals & allied products | 33.5 | 6.7 | 5.4 |
| Fabricated metal products | 19.5 | 4.4 | 3.2 |
| Petroleum & coal products | 15.1 | 4.3 | 3.4 |
| Lumber & wood products | 14.1 | -3.7 | -4.9 |

Louisiana experienced a total manufacturing employment change of 30,000 over the analysis period. As shown above, regional shift factors tended to dominate that growth. Of particular interest is the employment decline in the lumber and wood products industry. The regional shift value indicates that Louisiana is losing its competitive advantages in lumber and wood products production; within the region, Arkansas is also in a similar position.

***Missouri.*** Unlike the other states under study, Missouri actually lost employment in manufacturing during the 1974-1981 period. Because it is not a major energy-producing state, Missouri did not share in the employment growth experienced by the other states during the energy-boom. Instead, its employment pattern reflected the general malaise in manufacturing nationwide. Heavy losses were sustained in Missouri's transportation equipment and other durable goods industries, and approximately 7,000 jobs were lost in fabricated metals, an industry that had favorable growth prospects nationally. Gains were achieved in printing and publishing, but at a lower rate than would be expected by national growth patterns. Electrical and electronic equipment was the only apparent bright spot in the manufacturing base. Missouri gained 5,600 jobs in this industry, with much of the gain in the form of a positive regional shift.

Manufacturing industries in Missouri with significant employment changes in the 1974-1981 period are listed in the table, "Selected Manufacturing Industries of Missouri," on the following page. During the period from 1974 to 1981, a total of 24,000 manufacturing jobs were lost in Missouri. Review of the regional shift components indicates a distinct loss of comparative advantage in fabricated metal products and transportation equipment. In printing and publishing, the employment change was positive, but the regional shift indicates that the gain was not as large as it should have been. On the other hand, the loss of jobs in leather products was due, almost entirely, to national trends. The gain in electrical and electronic equipment stands in marked contrast to other categories. Further exploration of the nature of this gain in Missouri is needed.

***New Mexico.*** Because of the smallness of its manufacturing base and the meagerness of data reported on a detailed industry basis, this state provides little in the way of insight into potential growth opportunities. Only seven percent of nonagricultural employment is in manufacturing in New Mexico, and the principal sectors of growth have been in the unrevealing miscellaneous durables and nondurables categories. While there is little to say about the structure of manufacturing in this state, it is interesting to note that this state, Arkansas, and Colorado are the only states in the eight state region to enjoy an increase in manufacturing employment since 1981.

- New Mexico gained 4,700 jobs in manufacturing during the analysis period, on a base of only 29,600 such jobs in 1974. Because of the lack of detail in reporting by industry, regional shift components are not presented. Nevertheless, it is acknowledged that most of the manufacturing employment gains are attributed to favorable regional shifts.

***Texas.*** With a nonagricultural workforce of 6.7 million and manufacturing employment of almost one million, Texas is a potent economic force in both the regional and national economies. Although it has a diversified manufacturing base, there is some concentration in the industry engaged in producing nonelectrical machinery, including oilfield

### Selected Manufacturing Industries of Missouri

| Industry | 1981 Employment (in thousands) | Total 1974-81 Change (in thousands) | Regional Shift Component (in thousands) |
|---|---|---|---|
| Electrical & electronic equipment | 54.0 | 5.6 | 4.1 |
| Printing & publishing | 37.8 | 3.3 | -1.5 |
| Leather & related products | 21.0 | -4.4 | -.3 |
| Fabricated metal products | 28.9 | -7.0 | -9.1 |
| Other nondurable goods | 40.8 | -7.0 | -4.1 |
| Transportation equipment | 59.9 | -11.2 | -14.0 |

equipment. This affected employment growth during both the oil boom and the oil bust.

Between 1974 and 1981, total manufacturing employment in Texas rose from 831,300 to 1,115,300, while employment in nonelectrical machinery doubled, climbing from 96,000 to 193,000. This increase in nonelectrical machinery employment represented about one-third of the overall manufacturing employment gain during this period. Similarly this industry was overrepresented in the recent employment declines in Texas' manufacturing sector. Since 1981, overall manufacturing employment has dropped back by somewhat less than 140,000 workers, with nonelectrical machinery workers representing 50 percent of this decline.

Despite obvious problems with energy-related manufacturing industries, the relative loss in manufacturing employment since 1981 in Texas has been substantially less than that experienced in Oklahoma. The Texas decline in manufacturing employment represents only a 12 percent loss, while Oklahoma's decline amounts to a 19 percent loss. Consequently, Texas is an important state to examine for growth opportunities even though it too, like Oklahoma, has suffered greatly from having a manufacturing base tied too strongly to energy-related goods production.

Manufacturing industries in Texas with significant employment changes in the 1974-1981 period are included in the following table, "Selected Manufacturing Industries of Texas."

In general, the employment gains over this period were dominated by a high degree of regional shift. Even in a declining industry, apparel and other textile products, Texas received a substantial regional shift. The major exception is in the instruments and related products industry where only about one-seventh of the total employment change is attributable to expanding regional competitiveness.

### Selected Manufacturing Industries of Texas

| Industry | 1981 Employment (in thousands) | Total 1974-81 Change (in thousands) | Regional Shift Component (in thousands) |
|---|---|---|---|
| Nonelectrical machinery | 193.0 | 96.6 | 84.1 |
| Electrical & electronic equipment | 104.8 | 36.7 | 36.6 |
| Fabricated metal products | 103.1 | 24.4 | 19.8 |
| Transportation equipment | 84.6 | 19.2 | 16.6 |
| Printing & publishing | 64.9 | 19.0 | 12.7 |
| Chemicals & allied products | 83.4 | 16.0 | 12.8 |
| Primary metal industries | 52.0 | 12.5 | 19.0 |
| Other nondurable goods | 34.0 | 12.4 | 10.9 |
| Stone, clay & glass products | 45.7 | 10.2 | 12.9 |
| Food & kindred products | 98.4 | 9.8 | 11.8 |
| Instruments & related products | 24.9 | 7.9 | 1.1 |
| Lumber & wood products | 37.1 | 4.9 | 2.7 |
| Paper & allied products | 22.9 | 4.8 | 5.1 |
| Leather & leather products | 10.7 | 4.2 | 5.2 |
| Miscellaneous durable goods | 13.5 | 2.6 | 6.3 |
| Apparel & other textile products | 73.8 | -.5 | 5.2 |
| Furniture & fixtures | 16.6 | -1.8 | -0.1 |
| Textile mill products | 5.7 | -2.2 | -.9 |

Of course, several major national economic events have transpired since 1981. As a consequence of problems in the energy sector, nonelectrical machinery and fabricated metal products have declined as important sources of growth impulses in the Texas economy—over the last few years, these industries have accounted for a sizable proportion of the total decline in manufacturing employment. Despite these setbacks, there are a host of other industries that have fared better in Texas than in the nation. As a result, the decline in manufacturing employment in Texas has been small in comparison to Oklahoma and other states.

This analysis suggests that Oklahoma would do well to pay greater attention to the industries, say, in the upper one-half of the Texas list in terms of the potential that they offer for improved growth prospects in Oklahoma.

## Conclusion

It is clear that Oklahoma's border states vary substantially in their manufacturing bases and trends in manufacturing employment (Table 1). In 1986, the manufacturing sector's share of total nonagricultural employment ranged from a high of 26.1 percent (Arkansas) to a low of 7.1 percent (New Mexico). In all states, these shares were below what they were in 1970. Despite this decline in the relative importance of manufacturing employment, the number of workers employed in manufacturing industries increased steadily in three states—Arkansas, Colorado, and New Mexico—between 1970 and 1986. In three additional states—Kansas, Oklahoma, and Texas—the 1986 manufacturing employment figures were above 1970 levels, despite declines since 1980. Only two states—Louisiana and New Mexico—experienced drops in manufacturing employment between 1970 and 1986.

As shown in Table 1, Arkansas has a particularly sizable manufacturing base, with 26.1 percent of its nonagricultural work force employed in manufacturing. This state has shown slow but stable growth in manufacturing employment since 1970.

With 13.2 percent of its total nonagricultural labor force working in manufacturing industries, Colorado has a fairly modest manufacturing base. Colorado has made significant gains in recent years, particularly in high tech industries, and has remained on a moderately healthy growth path despite obstacles at the national level.

Kansas has 17.8 percent of its nonagricultral work force employed in manufacturing, the third highest share in the region. However, its concentrated industry structure has made its manufacturing sector especially vulnerable to national recessions and changes in defense policy. Despite substantial growth in the 1970-1980 period, manufacturing employment dropped by over 15,000 workers between 1980 and 1986.

Louisiana's manufacturing base rose and fell with the oil boom and bust. In spite of an increase in manufacturing

## TABLE 1

### Manufacturing Employment
### Oklahoma vs. Surrounding States
### 1970, 1980, 1986

| | Arkansas | | | Colorado | | |
|---|---|---|---|---|---|---|
| | 1970 | 1980 | 1986[a] | 1970 | 1980 | 1986[a] |
| Total Nonagricultural Employment | 536.2 | 742.3 | 819.3 | 750.2 | 1251.1 | 1442.5 |
| Manufacturing | 168.6 | 209.1 | 213.7 | 120.8 | 180.4 | 190.2 |
| Percent Manufacturing | 31.4 | 28.2 | 26.1 | 16.1 | 14.4 | 13.2 |
| Durable Goods | 87.4 | 112.8 | 113.6 | NA | 116.6 | 120.7 |
| Percent Durable Goods | 16.3 | 15.2 | 13.9 | NA | 9.3 | 8.4 |
| Nondurable Goods | 81.2 | 96.3 | 100.1 | NA | 63.8 | 69.4 |
| Percent Nondurable Goods | 15.1 | 13.0 | 12.2 | NA | 5.1 | 4.8 |

| | Kansas | | | Louisiana | | |
|---|---|---|---|---|---|---|
| | 1970 | 1980 | 1986[a] | 1970 | 1980 | 1986[a] |
| Total Nonagricultural Employment | 678.8 | 944.7 | 984.4 | 1033.6 | 1578.9 | 1540.9 |
| Manufacturing | 137.2 | 190.5 | 175.2 | 179.0 | 214.2 | 167.7 |
| Percent Manufacturing | 20.2 | 20.2 | 17.8 | 17.3 | 13.6 | 10.9 |
| Durable Goods | NA | 122.3 | 104.1 | NA | 103.7 | 74.1 |
| Percent Durable Goods | NA | 12.9 | 10.6 | NA | 6.6 | 4.8 |
| Nondurable Goods | NA | 68.2 | 71.0 | NA | 110.5 | 93.6 |
| Percent Nondurable Goods | NA | 7.2 | 7.2 | NA | 7.0 | 6.1 |

| | Missouri | | | New Mexico | | |
|---|---|---|---|---|---|---|
| | 1970 | 1980 | 1986[a] | 1970 | 1980 | 1986[a] |
| Total Nonagricultural Employment | 1668.0 | 1969.8 | 2138.2 | 292.6 | 465.4 | 521.9 |
| Manufacturing | 449.4 | 437.0 | 424.5 | 21.4 | 34.4 | 37.2 |
| Percent Manufacturing | 26.9 | 22.2 | 19.9 | 7.3 | 7.4 | 7.1 |
| Durable Goods | NA | 245.6 | 241.9 | 12.1 | 20.5 | 24.1 |
| Percent Durable Goods | NA | 12.5 | 11.3 | 4.1 | 4.4 | 4.6 |
| Nondurable Goods | NA | 191.4 | 182.6 | 9.4 | 13.8 | 13.1 |
| Percent Nondurable Goods | NA | 9.7 | 8.5 | 3.2 | 3.0 | 2.5 |

| | Oklahoma | | | Texas | | |
|---|---|---|---|---|---|---|
| | 1970 | 1980 | 1986[a] | 1970 | 1980 | 1986[a] |
| Total Nonagricultural Employment | 762.6 | 1138.1 | 1155.6 | 3624.9 | 5851.2 | 6686.2 |
| Manufacturing | 134.1 | 191.3 | 162.4 | 734.3 | 1056.9 | 977.0 |
| Percent Manufacturing | 17.6 | 16.8 | 14.1 | 20.3 | 18.1 | 14.6 |
| Durable Goods | 81.1 | 124.3 | 101.0 | 403.0 | 631.6 | 570.8 |
| Percent Durable Goods | 10.6 | 10.9 | 8.7 | 11.1 | 10.8 | 8.5 |
| Nondurable Goods | 53.0 | 67.0 | 61.4 | 331.3 | 425.3 | 406.2 |
| Percent Nondurable Goods | 6.9 | 5.9 | 5.3 | 9.1 | 7.3 | 6.1 |

Source: U.S Department of Labor, Bureau of Labor Statistics, Series 705 data tape.

[a] 1986 employment levels are averages based on the months January-September.

employment during the decade of the 1970s, total manufacturing employment is now substantially less than it was before the oil boom, and the state faces an uncertain future.

Missouri shows signs of rust belt-itis. Although almost 20 percent of its nonagricultural labor force is employed in manufacturing, total manufacturing employment has been declining slowly since 1970. The 1986 manufacturing employment level is approximately 25,000 workers below the 1970 level.

Although its manufacturing sector continues to be underdeveloped, New Mexico experienced employment growth in manufacturing between 1970 and 1986. In the 1970-1980 period, manufacturing employment grew at an average annual rate of 4.9 percent per year, while in the 1980-1986 period, growth averaged 1.3 percent per year. These rates exceeded those of any other state in the region.

Oklahoma's manufacturing employment represents about 14 percent of the state's total nonagricultural employment, which is about average for the region. Following healthy growth in manufacturing employment in the period from 1970 to 1980, Oklahoma experienced a fall in manufacturing employment during the 1980s. Between 1980 and 1986, in response to both the national recession and the drop in oil prices, Oklahoma's manufacturing employment fell at an average rate of 2.7 percent per year. However, unlike Louisiana, the size of Oklahoma's manufacturing sector did not dip below 1970 levels.

Despite having suffered like Oklahoma from the downside risk of a significant concentration of energy-related manufacturing, Texas continues to be a strong economic force in the region. During the 1980s, manufacturing employment dropped by almost 80,000 workers, at an average annual rate of 1.3 percent per year. Even with these losses, manufacturing employment in Texas in 1986 was well above the 1970 figure.

The experiences of Oklahoma, surrounding states, and the nation offer several points relevant to Oklahoma's economic development efforts. First, the analysis shows that the problems that Oklahoma is having in the manufacturing sector extend far beyond the problems associated with the state's ties to energy-related capital goods production. From an employment perspective, the national manufacturing sector is declining relative to other sectors in the U.S. economy. Undoubtedly, Oklahoma is experiencing more than its share of such problems given its link to energy production: since 1981, manufacturing employment has fallen only 5 percent nationally, compared to 20 percent in Oklahoma. However, if the national manufacturing sector begins to grow, Oklahoma should also return to a positive trend. With growth, manufacturing employment will no longer be the zero-sum game among the states that it has been for the past 10 years.

Second, the analysis indicates that many of the gains in Oklahoma and surrounding states have come via favorable regional shifts. Although a number of these gains have withered as a consequence of the energy bust, the south and southwest were leaders in economic growth in the 1970s, and many of the competitive advantages that led to this better-than-average growth remain in place today. The manufacturing industry winners nationally were, with few exceptions, the manufacturing winners in Oklahoma and surrounding states. With a turnaround in manufacturing employment nationally, Oklahoma and its neighbors can hope to experience better-than-average growth.

Third, most of the problems caused by the energy-related component of manufacturing in the region have probably been exhausted. The manufacturing base that remains can be built upon, thereby engendering economic growth and development.

Finally, it should be noted that there is much more to learn from the experiences of Oklahoma's neighbors. A study such as this is actually quite macro in its view of the economic landscape. It points out the "wheres" but not the "whys." There is need to shift from binoculars to microscopes in analyzing state economic growth trends. Much more detailed analysis will be necessary to better understand the reasons for the region's comparative successes, such as those in Colorado and Texas. With improved understanding, Oklahomans can hope to formulate and implement a public policy strategy for more rapid economic growth.

## Notes

[1] All data is from U.S. Department of Labor, Bureau of Labor Statistics, Series 705 data tape.

[2] Although the manufacturing sector has been declining in terms of employment, manufacturing output has remained fairly steady over this period.

[3] See Lage & Ireland (1978) and Ireland & Moomaw (1981) for previous shift-share analyses of Oklahoma.

[4] There is extensive literature on this technique. For example, see Ashby (1964; 1968), Creamer (1943); Dunn (1960; 1980); Houston (1967); and Perloff, Dunn, Lampard, & Muth (1960).

[5] The data indicate that Arkansas, Louisiana, and Texas had slightly lower-than-average shares of rapid growth industries, while Colorado and New Mexico exhibited considerably lower-than-average shares. However, this data should be used with caution since industry detail on manufacturing employment varies by state. Industries that appear separately in national totals are frequently aggregated at the state level. Therefore, the shares may be understated.

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# OKLAHOMA BUSINESS BULLETIN

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## SUMMARY OF INDICATORS

| Category | 10 Mos. '87 | 10 Mos. '86 | Oct. '87 | Percentage Change 10 Mos. '87/86 | Percentage Change Oct./Sept. '87 |
|---|---|---|---|---|---|
| **Personal Income (Monthly Average)** | | | | | |
| Unadjusted ($000,000) | 3,448 | 3,383 | 3,556 | 1.9 | 1.7 |
| Adjusted for CPI ($000,000) | 1,016 | 1,032 | 1,030 | -1.6 | 1.3 |
| **Crude Oil Production (000 bbl)**[a] | 100,388 | 110,600 | 10,709 | -9.2 | -2.1 |
| **Industrial Power Sales (000,000 Kwh)**[b] | 6,846 | 6,755 | 706 | 1.3 | -2.9 |
| **Total Bank Deposits (Monthly Average) ($000,000)**[c] | | | | | |
| Demand | 7,520 | 7,380 | 7,513 | 1.9 | -1.6 |
| Savings | 25,464 | 26,417 | 24,690 | -3.6 | -1.1 |
| **Savings and Loan Associations ($000,000)** | | | | | |
| Assets | 10,014.9 | 10,045.3 | 10,088.8 | -0.3 | -0.7 |
| Mortgage Loans Closed | 802.4 | 1,225.9 | 61.7 | -34.5 | 0.8 |
| **Employment**[d] | | | | | |
| Total Labor Force (000) | 1,562.1 | 1,594.0 | 1,546.9 | -2.0 | 0.5 |
| Total Employment (000) | 1,445.4 | 1,462.2 | 1,448.7 | -1.1 | 0.0 |
| Unemployment Rate (%) | 7.5 | 8.3 | 6.3 | — | — |
| **General Business Index** | NA | NA | NA | — | — |

Note: Includes revisions.
NA = Not Available.
[a] 9 months and September data.
[b] Sales of larger privately owned utility companies.
[c] Total deposits of all depository institutions.
[d] Civilian Labor Force.

## RETAIL TRADE IN SELECTED CITIES
($000)

| City | Oct. '87 Adjusted | Oct. '87 Unadjusted | Adjusted '87/'86 10 Mos. | Adjusted 1987 Oct./Sept. |
|---|---|---|---|---|
| Ada | 13,746 | 13,243 | -5.0 | 3.0 |
| Altus | 12,165 | 11,949 | -7.4 | 3.1 |
| Alva | 2,435 | 2,406 | -30.3 | 8.5 |
| Anadarko | 4,767 | 4,531 | -13.3 | 3.4 |
| Ardmore | 18,395 | 17,862 | -5.1 | 1.4 |
| Bartlesville | 17,835 | 18,029 | -5.2 | 3.4 |
| Blackwell | 2,929 | 2,970 | -12.0 | 8.7 |
| Broken Arrow | 17,119 | 17,104 | -7.7 | 0.6 |
| Chickasha | 8,630 | 8,590 | -7.3 | -1.5 |
| Clinton | 5,882 | 5,972 | -7.0 | 4.2 |
| Cushing | 5,340 | 5,075 | -12.5 | 1.7 |
| Del City | 10,748 | 10,345 | 10.0 | 2.7 |
| Duncan | 12,853 | 12,719 | -8.8 | 3.0 |
| Durant | 9,583 | 9,506 | 2.9 | 1.5 |
| Edmond | 22,387 | 22,187 | -13.4 | 11.0 |
| Elk City | 7,000 | 6,915 | -9.8 | -0.6 |
| El Reno | 7,302 | 7,272 | -9.6 | 0.5 |
| Guthrie | 4,848 | 4,823 | -11.3 | 3.0 |
| Guymon | 4,292 | 4,214 | -10.2 | 3.7 |
| Henryetta | 4,619 | 4,371 | -9.8 | 3.8 |
| Hobart | 2,209 | 2,206 | -9.6 | 0.0 |
| Holdenville | 2,552 | 2,543 | -9.7 | 1.6 |
| Hugo | 2,608 | 2,568 | -8.3 | 6.2 |
| Idabel | 3,532 | 3,528 | -10.5 | 1.5 |
| Lawton | 48,219 | 47,106 | -0.6 | 2.3 |
| McAlester | 9,411 | 9,471 | -6.7 | 5.7 |
| Miami | 11,470 | 10,868 | -7.2 | 1.1 |
| Midwest City | 32,015 | 31,499 | -6.9 | -6.8 |
| Moore | 13,193 | 13,368 | -6.0 | 3.2 |
| Muskogee | 27,973 | 27,471 | [illegible] | 1.7 |
| Norman | 53,682 | 55,209 | -8.7 | 1.6 |
| Oklahoma City | 255,689 | 249,587 | [illegible] | -1.4 |
| Okmulgee | 5,332 | 5,290 | [illegible] | -6.9 |
| Pauls Valley | 4,002 | 3,965 | [illegible] | 2.5 |
| Pawhuska | 1,367 | 1,320 | [illegible] | -3.0 |
| Ponca City | 15,393 | 15,103 | [illegible] | -2.7 |
| Poteau | 4,141 | 4,189 | [illegible] | 17.6 |
| Sand Springs | 8,284 | 8,221 | [illegible] | 5.7 |
| Sapulpa | 11,622 | 11,593 | [illegible] | 0.3 |
| Seminole | 5,252 | 5,285 | -11.5 | -4.2 |
| Shawnee | 24,126 | 23,945 | -2.8 | 4.3 |
| Stillwater | 24,030 | 23,993 | 2.8 | 2.7 |
| Tahlequah | 7,239 | 7,196 | -1.8 | -2.3 |
| Tulsa | 226,028 | 225,664 | -5.5 | -0.6 |
| Watonga | 1,752 | 1,597 | -7.9 | 1.2 |
| Weatherford | 5,154 | 5,116 | -11.5 | 9.4 |
| Wewoka | 1,107 | 1,129 | -7.8 | 14.1 |
| Woodward | 10,640 | 10,525 | -9.1 | 3.5 |
| **Total** | **1,010,897** | **999,638** | -5.4 | 0.5 |

## RETAIL TRADE IN METRO AREAS AND STATE
($000)

| | 10 Mos. '87 | 10 Mos. '86 | Oct. '87 | | Percentage Change | | |
|---|---|---|---|---|---|---|---|
| | | | | | 10 Mos. '87/'86 | Oct./Sept. '87 | |
| Retail Trade | Adjusted | Adjusted | Adjusted | Unadjusted | Adjusted | Adjusted | Unadjusted |
| **OKLAHOMA CITY MSA** | | | | | | | |
| Food | 1,870,088 | 1,896,901 | 196,268 | 178,561 | -1.4 | 2.0 | -6.8 |
| Apparel | 146,544 | 156,979 | 13,250 | 12,878 | -6.6 | -1.9 | -3.4 |
| General Merchandise | 586,610 | 599,315 | 61,451 | 57,343 | -2.1 | 1.9 | 7.4 |
| Furniture | 236,932 | 228,074 | 23,624 | 22,705 | 3.9 | 2.9 | -0.7 |
| Lumber | 142,053 | 165,290 | 15,103 | 15,412 | -14.1 | 1.6 | 0.6 |
| Auto Dealers | 1,318,310 | 1,493,428 | 117,534 | 130,241 | -11.7 | -4.2 | 10.9 |
| Service Stations | 171,528 | 180,786 | 16,869 | 17,405 | -5.1 | -2.6 | -3.7 |
| All Other | 579,329 | 568,433 | 62,566 | 59,788 | 1.9 | 0.1 | 6.4 |
| Total | 5,051,394 | 5,289,206 | 506,665 | 494,333 | -4.5 | 0.0 | 1.3 |
| **TULSA MSA** | | | | | | | |
| Food | 1,107,991 | 1,129,229 | 114,732 | 111,698 | -1.9 | 2.7 | 3.0 |
| Apparel | 140,545 | 141,702 | 13,839 | 13,055 | -0.8 | -6.8 | -5.8 |
| General Merchandise | 481,202 | 476,756 | 50,740 | 48,804 | 0.9 | 0.4 | 5.0 |
| Furniture | 189,342 | 200,037 | 19,355 | 18,700 | -5.3 | -2.0 | -2.9 |
| Lumber | 115,491 | 134,674 | 11,648 | 11,750 | -14.2 | -0.5 | -1.5 |
| Auto Dealers | 767,051 | 868,941 | 68,386 | 75,779 | -11.7 | -4.2 | 10.9 |
| Service Stations | 127,214 | 136,217 | 14,298 | 14,299 | -6.6 | 0.5 | -3.7 |
| All Other | 60,524 | 68,825 | 5,228 | 2,967 | -12.1 | 20.5 | -45.7 |
| Total | 2,989,360 | 3,156,381 | 298,226 | 297,052 | -5.3 | -0.1 | 2.9 |
| **ENID MSA** | | | | | | | |
| Food | 94,057 | 97,027 | 9,678 | 9,571 | -3.1 | 0.4 | 7.2 |
| Apparel | 15,170 | 15,327 | 1,440 | 1,385 | -1.0 | -4.6 | 3.8 |
| General Merchandise | 40,257 | 39,857 | 4,247 | 4,002 | 1.0 | 2.8 | 12.1 |
| Furniture | 9,873 | 9,982 | 914 | 930 | -1.1 | 5.8 | 4.1 |
| Lumber | 13,349 | 14,422 | 1,362 | 1,564 | -7.4 | 3.7 | 10.9 |
| Auto Dealers | 75,453 | 85,465 | 6,728 | 7,455 | -11.7 | -4.2 | 11.0 |
| Service Stations | 12,644 | 13,332 | 1,243 | 1,283 | -5.2 | -2.7 | -3.7 |
| All Other | 29,445 | 27,919 | 3,216 | 2,674 | 5.5 | 11.7 | -7.0 |
| Total | 290,248 | 303,331 | 28,828 | 28,864 | -4.3 | 0.7 | 6.7 |
| **LAWTON MSA** | | | | | | | |
| Food | 159,145 | 155,356 | 16,647 | 15,982 | 2.4 | 7.2 | 7.4 |
| Apparel | 18,340 | 17,112 | 1,741 | 1,663 | 7.2 | 0.0 | -0.2 |
| General Merchandise | 116,130 | 97,426 | 12,710 | 11,386 | 19.2 | 4.2 | 10.4 |
| Furniture | 22,255 | 26,356 | 2,341 | 2,209 | -15.6 | -7.3 | -0.3 |
| Lumber | 16,456 | 19,336 | 1,787 | 1,850 | -14.9 | 3.4 | 7.4 |
| Auto Dealers | 100,552 | 113,912 | 8,964 | 9,933 | -11.7 | -4.2 | 10.9 |
| Service Stations | 8,632 | 9,089 | 849 | 876 | -5.0 | -2.6 | -3.7 |
| All Other | 32,516 | 35,771 | 3,841 | 3,417 | -9.1 | 21.4 | -9.7 |
| Total | 474,026 | 474,358 | 48,880 | 47,316 | -0.1 | 3.8 | 6.4 |
| **MUSKOGEE AREA** | | | | | | | |
| Food | 111,997 | 117,441 | 10,891 | 10,168 | -4.6 | -1.1 | -6.4 |
| Apparel | 16,194 | 15,870 | 1,736 | 1,600 | 2.0 | -1.0 | -3.0 |
| General Merchandise | 34,585 | 34,315 | 4,115 | 3,912 | 0.8 | -0.3 | 3.9 |
| Furniture | 11,831 | 12,551 | 2,189 | 2,413 | -5.7 | 115.0 | 149.3 |
| Lumber | 4,341 | 5,088 | 357 | 406 | -14.7 | -13.3 | -6.5 |
| Auto Dealers | 63,425 | 71,865 | 5,655 | 6,266 | -11.7 | -4.3 | 10.9 |
| Service Stations | 11,069 | 11,682 | 1,088 | 1,122 | -5.2 | -2.5 | -3.7 |
| All Other | 30,009 | 28,377 | 2,743 | 2,785 | 5.8 | -21.8 | -12.0 |
| Total | 283,451 | 297,189 | 28,774 | 28,672 | -4.6 | -0.3 | 3.7 |
| **STATE**[a] | | | | | | | |
| **Durable Goods** | 4,717,824 | 5,294,272 | 442,082 | 470,299 | -10.9 | -3.1 | 7.1 |
| Auto Dealers | 3,294,014 | 3,732,000 | 293,654 | 325,401 | -11.7 | -4.2 | 10.9 |
| Accessory Dealers | 274,900 | 284,942 | 26,993 | 26,684 | -3.5 | -9.4 | -8.5 |
| Total Automotive | 3,568,914 | 4,016,942 | 320,647 | 352,085 | -11.2 | -4.7 | 9.2 |
| Furniture | 208,734 | 226,125 | 20,225 | 20,728 | -7.7 | -1.7 | 2.1 |
| Household Appliances | 190,337 | 197,672 | 20,046 | 20,153 | -3.7 | -4.3 | -2.3 |
| Total Furniture and Appliances | 399,071 | 423,797 | 40,271 | 40,881 | -5.8 | -3.0 | -0.1 |
| Lumber and Building Materials | 466,902 | 524,557 | 48,302 | 50,852 | -11.0 | 0.9 | 1.0 |
| Hardware Stores | 52,720 | 53,155 | 5,342 | 5,130 | -0.8 | -2.8 | -2.1 |
| Total Lumber, Building Materials & Hardware | 519,622 | 577,712 | 53,644 | 55,982 | -10.1 | 0.5 | 0.7 |
| **Nondurable Goods** | 8,478,532 | 9,230,862 | 814,142 | 761,028 | -8.2 | 2.8 | 0.8 |
| Apparel | 519,938 | 524,676 | 50,791 | 48,678 | -0.9 | -2.9 | -3.0 |
| Drug Stores | 453,960 | 412,455 | 45,909 | 45,961 | 10.1 | -0.8 | 8.9 |
| Eating and Drinking Places | 1,568,488 | 1,554,510 | 150,496 | 148,736 | 0.9 | -1.5 | -1.5 |
| Food Group | 3,173,713 | 3,897,928 | 285,147 | 254,241 | -18.6 | 9.4 | -1.5 |
| Service Stations | 563,235 | 593,700 | 55,402 | 57,149 | -5.1 | -2.6 | -3.7 |
| General Merchandise Group | 1,576,625 | 1,601,345 | 158,288 | 153,652 | -1.5 | 1.4 | 8.9 |
| **Total Retail Trade** | 13,196,356 | 14,525,134 | 1,256,224 | 1,231,327 | -9.1 | 0.6 | 3.1 |

[a] Total includes data for categories not shown in the table.

## ENID AND LAWTON MSAs
## MUSKOGEE MA

| Category | 10 Mos. '87 | 10 Mos. '86 | Oct. '87 | Percentage Change<br>10 Mos. '87/'86 | Percentage Change<br>Oct./Sept. '87 |
|---|---|---|---|---|---|
| **ENID MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 29,678 | 31,400 | 29,425 | -5.5 | 0.2 |
| Total Employment | 27,560 | 28,900 | 27,775 | -4.6 | -0.1 |
| Unemployment Rate (%) | 7.2 | 7.9 | 5.6 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 1,726 | 1,585 | 453 | 8.9 | 64.7 |
| Number of Units | 18 | 22 | 0 | -18.2 | — |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 6,000 | 0 | — | 0.0 |
| Number of Units | 0 | 124 | 0 | — | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 464 | 789 | 12 | -41.1 | -38.3 |
| Industrial ($000) | 1,194 | 1,587 | 0 | -24.8 | 0.0 |
| Institutional ($000) | 2,052 | 0 | 2,052 | — | — |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 264 | 496 | 0 | -46.7 | — |
| All Other Nonbuilding ($000) | 318 | 9 | 11 | E | -63.1 |
| Total Construction ($000) | 6,019 | 10,465 | 2,528 | -42.5 | 329.8 |
| **LAWTON MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 47,735 | 48,400 | 47,825 | -1.6 | 0.6 |
| Total Employment | 45,325 | 46,000 | 45,575 | -1.5 | 0.6 |
| Unemployment Rate (%) | 5.1 | 5.0 | 4.7 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 16,403 | 18,903 | 1,796 | -13.2 | 119.1 |
| Number of Units | 254 | 303 | 26 | -16.2 | 85.7 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 400 | 2,119 | 0 | -81.1 | 0.0 |
| Number of Units | 16 | 78 | 0 | -79.5 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 3,503 | 5,050 | 690 | -30.6 | E |
| Industrial ($000) | 20 | 1,152 | 0 | -98.3 | 0.0 |
| Institutional ($000) | 1,400 | 1,638 | 0 | -14.5 | — |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 712 | 4,049 | 213 | -82.4 | — |
| All Other Nonbuilding ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Total Construction ($000) | 22,438 | 32,910 | 2,700 | -31.8 | 19.1 |
| **MUSKOGEE MA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 32,955 | 32,900 | 33,100 | 0.2 | 0.8 |
| Total Employment | 30,132 | 30,000 | 30,325 | 0.4 | -0.1 |
| Unemployment Rate (%) | 8.6 | 9.1 | 8.4 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 4,922 | 1,008 | 529 | 388.1 | — |
| Number of Units | 66 | 15 | 6 | 340.0 | — |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 1,427 | 2,167 | 0 | -34.1 | 0.0 |
| Number of Units | 35 | 40 | 0 | -12.5 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 8,369 | 253 | 15 | E | — |
| Industrial ($000) | 2,465 | 0 | 0 | — | 0.0 |
| Institutional ($000) | 1,523 | 1,629 | 0 | -6.5 | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 79 | 319 | 0 | -75.4 | 0.0 |
| All Other Nonbuilding ($000) | 14 | 15 | 0 | -9.4 | 0.0 |
| Total Construction ($000) | 18,798 | 5,391 | 544 | 248.7 | — |

Note: Includes revisions.

E = Exceeds 600 percent.

Sources for all tables: Local utilities companies; 10th Federal Reserve District Member Banks; Federal Home Loan Bank of Topeka; Oklahoma Employment Security Commission; United States Department of Commerce, Construction Statistics Division; Oklahoma Department of Transportation, *Progressive Report of the Transportation Director;* Center for Economic and Management Research, College of Business Administration, The University of Oklahoma. The data for all tables were compiled by Marjorie E. Earley, Statistician for CEMR and Brian M. Hickey, Research Assistant.

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**Center for Economic and Management Research**
**University of Oklahoma**
**Norman, Oklahoma 73069**

## OKLAHOMA CITY AND TULSA MSAs

| Category | 10 Mos. '87 | 10 Mos. '86 | Oct. '87 | Percentage Change<br>10 Mos.'87/'86 | Percentage Change<br>Oct./Sept. '87 |
|---|---|---|---|---|---|
| **OKLAHOMA CITY MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 502,940 | 517,800 | 502,400 | -2.7 | 0.4 |
| Total Employment | 467,040 | 482,700 | 474,600 | -3.2 | 0.1 |
| Unemployment Rate (%) | 6.2 | 6.8 | 5.5 | — | — |
| **Mortgage Loans Closed ($000,000)**[a] | 192.0 | 275.6 | 15.6 | -30.0 | 7.6 |
| **Bank Deposits ($000,000)**[b] | | | | | |
| Demand Deposits | 917 | 934 | 926 | -1.8 | -3.4 |
| Time and Savings Deposits | 1,656 | 2,181 | 1,198 | -24.1 | -11.4 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 131,290 | 160,303 | 11,294 | -18.1 | -10.2 |
| Number of Units | 2,064 | 2,673 | 149 | -22.8 | -19.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 5,008 | 27,657 | 3,665 | -81.9 | — |
| Number of Units | 150 | 953 | 91 | -84.3 | — |
| Nonresidential | | | | | |
| Commercial ($000) | 117,954 | 53,494 | 25,335 | 120.5 | 175.5 |
| Industrial ($000) | 3,632 | 4,187 | 150 | -13.3 | -26.8 |
| Institutional ($000) | 19,292 | 7,739 | 5,515 | 149.3 | 516.2 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 40,359 | 39,296 | 692 | 2.7 | -81.5 |
| All Other Nonbuilding ($000) | 4,034 | 2,941 | 115 | 37.2 | -13.4 |
| Total Construction ($000) | 321,570 | 295,617 | 46,765 | 8.8 | 74.8 |
| **General Business Index** | NA | NA | NA | — | — |
| **TULSA MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 357,500 | 357,700 | 354,500 | -0.1 | 0.5 |
| Total Employment | 328,700 | 327,400 | 329,600 | 0.4 | 0.1 |
| Unemployment Rate (%) | 8.0 | 8.5 | 7.0 | — | — |
| **Mortgage Loans Closed ($000,000)**[a] | 231.8 | 260.4 | 16.9 | -11.0 | -0.6 |
| **Bank Deposits ($000,000)**[b] | | | | | |
| Demand Deposits | 850 | 698 | 835 | 21.8 | -3.8 |
| Time and Savings Deposits | 2,310 | 2,018 | 2,189 | 14.4 | -4.5 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 105,680 | 97,213 | 8,398 | 8.7 | -15.9 |
| Number of Units | 1,519 | 1,559 | 112 | -2.6 | -21.7 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 11,282 | 32,485 | 0 | -65.3 | 0.0 |
| Number of Units | 526 | 876 | 0 | -40.0 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 18,535 | 45,020 | 888 | -58.8 | -60.2 |
| Industrial ($000) | 11,766 | 9,382 | 2,298 | 25.4 | -38.6 |
| Institutional ($000) | 12,053 | 24,327 | 1,109 | -50.5 | 71.9 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 23,385 | 18,490 | 6,807 | 26.5 | 127.1 |
| All Other Nonbuilding ($000) | 3,670 | 5,401 | 84 | -32.0 | -22.4 |
| Total Construction ($000) | 186,370 | 232,318 | 19,585 | -19.8 | -0.7 |
| **General Business Index** | NA | NA | NA | — | — |

Note: Includes revisions.
NA = Not Available.

[a] By Savings and Loan Associations.
[b] Total Deposits in Large Commercial Banks.

## CONSTRUCTION, STATE

| Category | 10 Mos. '87 | 10 Mos. '86 | Oct. '87 | Percentage Change<br>10 Mos. '87/'86 | Percentage Change<br>Oct./Sept. '87 |
|---|---|---|---|---|---|
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 286,501 | 300,475 | 25,782 | -4.7 | -2.5 |
| Number of Units | 4,250 | 4,900 | 330 | -13.3 | -13.8 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 22,129 | 73,131 | 4,165 | -69.7 | — |
| Number of Units | 877 | 2,202 | 123 | -60.2 | — |
| Nonresidential | | | | | |
| Commercial ($000) | 166,398 | 119,756 | 28,404 | 38.9 | 89.3 |
| Industrial ($000) | 20,186 | 17,983 | 3,148 | 12.2 | -20.2 |
| Institutional ($000) | 44,393 | 49,183 | 10,861 | -9.7 | 269.4 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 161,687 | 140,561 | 28,893 | 15.0 | -1.5 |
| All Other Nonbuilding ($000) | 8,397 | 9,503 | 212 | -11.6 | -26.6 |
| Total Construction ($000) | 709,689 | 710,592 | 101,466 | -0.1 | 30.1 |

Note: Includes revisions.

3/8/88 U8130-1A

# OKLAHOMA BUSINESS BULLETIN

CENTER FOR ECONOMIC AND MANAGEMENT RESEARCH
COLLEGE OF BUSINESS ADMINISTRATION
THE UNIVERSITY OF OKLAHOMA

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ISSN 0030-1671

February 1988

VOL. 56, ISSUE 2

## SUMMARY OF INDICATORS

| Category | 11 Mos. '87 | 11 Mos. '86 | Nov. '87 | Percentage Change<br>11 Mos. '87/86 | Percentage Change<br>Nov./Oct. '87 |
|---|---|---|---|---|---|
| **Personal Income (Monthly Average)** | | | | | |
| Unadjusted ($000,000) | 3,439 | 3,382 | 3,521 | 1.7 | -0.5 |
| Adjusted for CPI ($000,000) | 1,012 | 1,031 | 1,018 | -1.8 | -0.6 |
| **Crude Oil Production (000 bbl)**[a] | 111,935 | 122,265 | 11,547 | -8.4 | 7.8 |
| **Industrial Power Sales (000,000 Kwh)**[b] | 7,531 | 7,405 | 685 | 1.7 | -3.0 |
| **Total Bank Deposits (Monthly Average) ($000,000)**[c] | | | | | |
| Demand | 7,513 | 7,368 | 7,450 | 2.0 | -0.8 |
| Savings | 25,393 | 26,327 | 24,680 | -3.6 | -0.0 |
| **Savings and Loan Associations ($000,000)** | | | | | |
| Assets | 10,022.1 | 10,042.8 | 10,095.1 | -2.1 | 0.0 |
| Mortgage Loans Closed | 850.5 | 1,301.1 | 48.1 | -34.6 | -22.0 |
| **Employment**[d] | | | | | |
| Total Labor Force (000) | 1,550.8 | 1,594.0 | 1,550.8 | -2.7 | 0.0 |
| Total Employment (000) | 1,446.4 | 1,462.4 | 1,456.4 | -1.1 | 0.5 |
| Unemployment Rate (%) | 7.4 | 8.2 | 6.4 | — | — |
| **General Business Index** | 94.0 | 91.1 | 94.6 | 3.2 | -1.8 |

Note: Includes revisions.

[a] 10 months and October data.

[b] Sales of larger privately owned utility companies.

[c] Total deposits of all depository institutions.

[d] Civilian Labor Force.

## RETAIL TRADE IN SELECTED CITIES
($000)

| City | Nov. '87<br>Adjusted | Nov. '87<br>Unadjusted | Adjusted<br>'87/'86<br>11 Mos. | Adjusted<br>1987<br>Nov./Oct. | City | Nov. '87<br>Adjusted | Nov. '87<br>Unadjusted | Adjusted<br>'87/'86<br>11 Mos. | Adjusted<br>1987<br>Nov./Oct. |
|---|---|---|---|---|---|---|---|---|---|
| Ada | 12,757 | 12,499 | -6.2 | -5.6 | McAlester | 8,424 | 8,548 | -9.5 | -9.7 |
| Altus | 10,986 | 11,096 | -8.4 | -7.1 | Miami | 10,969 | 10,480 | -3.2 | -3.6 |
| Alva[a] | 3,509 | 3,465 | -0.6 | 0.0 | Midwest City | 32,098 | 33,902 | 0.4 | 7.6 |
| Anadarko | 4,585 | 4,430 | -3.0 | -2.2 | Moore | 13,046 | 13,341 | -0.9 | -0.2 |
| Ardmore | 17,292 | 17,206 | -4.8 | -3.7 | Muskogee | 25,399 | 25,232 | -8.8 | -8.2 |
| Bartlesville | 18,293 | 18,544 | 2.7 | 2.9 | Norman | 53,659 | 54,581 | -0.3 | -1.1 |
| Blackwell | 2,756 | 2,806 | -4.8 | -5.5 | Oklahoma City | 263,400 | 271,351 | 3.1 | 8.7 |
| Broken Arrow | 18,392 | 18,049 | 7.9 | 5.5 | Okmulgee[a] | 4,899 | 4,929 | 1.0 | 3.5 |
| Chickasha | 8,547 | 8,515 | -0.4 | -0.9 | Pauls Valley | 4,271 | 4,225 | 6.2 | 6.6 |
| Clinton | 5,601 | 5,645 | -3.3 | -5.5 | Pawhuska | 1,837 | 1,764 | 36.7 | 33.6 |
| Cushing | 5,271 | 5,123 | -0.8 | 0.9 | Ponca City | 14,807 | 14,803 | -2.9 | -2.0 |
| Del City | 10,160 | 9,655 | -4.3 | -6.7 | Poteau | 3,945 | 4,166 | -3.1 | -0.5 |
| Duncan | 13,293 | 13,632 | 2.0 | 7.2 | Sand Springs | 8,470 | 8,303 | 2.1 | 1.0 |
| Durant | 8,742 | 8,524 | -8.1 | -10.3 | Sapulpa | 11,045 | 11,239 | -4.0 | -3.1 |
| Edmond | 24,079 | 23,898 | 7.0 | 7.7 | Seminole | 5,082 | 5,242 | -2.4 | -0.8 |
| Elk City | 7,048 | 6,950 | 1.0 | 0.5 | Shawnee | 23,951 | 24,141 | -0.4 | 0.8 |
| El Reno | 6,929 | 7,200 | -4.4 | -1.0 | Stillwater | 22,697 | 22,416 | -4.8 | -6.6 |
| Guthrie | 5,344 | 5,388 | 9.5 | 11.7 | Tahlequah | 7,169 | 7,018 | -0.8 | -2.5 |
| Guymon | 4,131 | 4,036 | -3.4 | -4.2 | Tulsa | 223,596 | 225,222 | -0.5 | -0.2 |
| Henryetta[a] | 3,037 | 2,992 | -0.4 | 3.4 | Watonga | 1,790 | 1,816 | 2.2 | 13.7 |
| Hobart | 1,945 | 2,038 | -11.5 | -7.6 | Weatherford | 4,707 | 4,757 | -7.3 | -7.0 |
| Holdenville | 2,274 | 2,398 | -10.4 | -5.7 | Wewoka | 982 | 976 | -10.4 | -13.6 |
| Hugo | 2,325 | 2,264 | -10.0 | -11.8 | Woodward | 10,430 | 10,588 | -0.9 | 0.6 |
| Idabel | 3,613 | 3,667 | 2.3 | 3.9 | | | | | |
| Lawton | 48,788 | 49,993 | 1.2 | 6.1 | **Total** | 1,006,370 | 1,019,053 | -0.0 | 2.0 |

[a] Revised.

## RETAIL TRADE IN METRO AREAS AND STATE
($000)

| | | | | | Percentage Change | | |
|---|---|---|---|---|---|---|---|
| | 11 Mos. '87 | 11 Mos. '86 | Nov. '87 | | 11 Mos. '87/'86 | Nov./Oct. '87 | |
| Retail Trade | Adjusted | Adjusted | Adjusted | Unadjusted | Adjusted | Adjusted | Unadjusted |
| **OKLAHOMA CITY MSA** | | | | | | | |
| Food | 2,084,090 | 2,093,824 | 210,319 | 201,590 | -0.5 | 6.2 | 12.8 |
| Apparel | 161,155 | 171,686 | 14,641 | 15,354 | -6.1 | 10.7 | 19.2 |
| General Merchandise | 652,308 | 662,179 | 63,640 | 68,840 | -1.5 | 3.1 | 20.0 |
| Furniture | 263,810 | 248,627 | 26,355 | 27,312 | 6.1 | 9.7 | 20.3 |
| Lumber | 154,441 | 179,736 | 13,127 | 12,035 | -14.1 | -11.7 | -21.9 |
| Auto Dealers | 1,420,728 | 1,648,281 | 109,302 | 119,413 | -13.8 | -7.9 | -8.3 |
| Service Stations | 190,256 | 195,728 | 18,611 | 18,156 | -2.8 | 9.2 | 4.3 |
| All Other | 642,355 | 632,221 | 63,669 | 58,513 | 1.6 | 2.9 | -2.0 |
| Total | 5,569,143 | 5,832,282 | 519,664 | 521,213 | -4.5 | 2.0 | 5.4 |
| **TULSA MSA** | | | | | | | |
| Food | 1,218,172 | 1,239,083 | 111,997 | 104,817 | -1.7 | -2.3 | -6.2 |
| Apparel | 153,931 | 155,718 | 13,416 | 14,752 | -1.1 | -3.5 | 13.0 |
| General Merchandise | 534,426 | 532,114 | 52,516 | 53,914 | 0.4 | 3.1 | 10.5 |
| Furniture | 211,898 | 218,427 | 22,274 | 21,111 | -3.0 | 14.2 | 12.9 |
| Lumber | 127,158 | 147,879 | 11,667 | 11,239 | -14.0 | 0.5 | -4.3 |
| Auto Dealers | 826,644 | 959,045 | 63,597 | 69,479 | -13.8 | -7.9 | -8.3 |
| Service Stations | 156,298 | 160,808 | 15,289 | 14,916 | -2.8 | 9.2 | 4.3 |
| All Other | 65,339 | 74,747 | 4,334 | 5,922 | -12.6 | -17.4 | 99.6 |
| Total | 3,293,866 | 3,487,821 | 295,090 | 296,150 | -5.6 | -1.3 | -0.3 |
| **ENID MSA** | | | | | | | |
| Food | 103,355 | 106,674 | 9,368 | 9,075 | -3.1 | -2.8 | -5.2 |
| Apparel | 16,662 | 16,762 | 1,494 | 1,419 | -0.6 | 3.5 | 2.5 |
| General Merchandise | 44,497 | 44,078 | 4,228 | 4,450 | 1.0 | -0.3 | 11.2 |
| Furniture | 11,023 | 10,895 | 1,093 | 1,086 | 1.2 | 16.8 | 16.8 |
| Lumber | 14,762 | 15,890 | 1,410 | 1,521 | -7.1 | 3.6 | -2.7 |
| Auto Dealers | 81,315 | 94,327 | 6,256 | 6,835 | -13.8 | -7.9 | -8.3 |
| Service Stations | 14,025 | 14,434 | 1,372 | 1,338 | -2.8 | 9.2 | 4.3 |
| All Other | 32,328 | 30,876 | 2,960 | 2,945 | 4.7 | -7.7 | 10.1 |
| Total | 317,967 | 333,936 | 28,181 | 28,669 | -4.8 | -2.4 | -0.7 |
| **LAWTON MSA** | | | | | | | |
| Food | 176,043 | 171,785 | 16,779 | 15,733 | 2.5 | 0.4 | -1.6 |
| Apparel | 20,037 | 18,814 | 1,732 | 1,701 | 6.5 | -0.1 | 2.3 |
| General Merchandise | 128,334 | 108,975 | 12,177 | 12,866 | 17.8 | -3.5 | 13.0 |
| Furniture | 24,955 | 28,968 | 2,652 | 2,650 | -13.9 | 10.8 | 20.0 |
| Lumber | 19,702 | 21,220 | 3,171 | 3,254 | -7.2 | 76.7 | 75.9 |
| Auto Dealers | 108,363 | 125,724 | 8,336 | 9,107 | -13.8 | -7.9 | -8.3 |
| Service Stations | 9,575 | 9,841 | 936 | 914 | -2.7 | 9.1 | 4.3 |
| All Other | 33,205 | 39,868 | 837 | 595 | -16.7 | -77.1 | -82.6 |
| Total | 520,214 | 525,195 | 46,620 | 46,820 | -0.9 | -4.5 | -1.0 |
| **MUSKOGEE AREA** | | | | | | | |
| Food | 122,706 | 129,134 | 10,825 | 9,684 | -5.0 | -0.2 | -4.8 |
| Apparel | 18,016 | 17,486 | 1,818 | 1,664 | 3.0 | 4.3 | 4.0 |
| General Merchandise | 38,220 | 37,661 | 3,715 | 3,687 | 1.5 | -8.9 | -5.8 |
| Furniture | 12,938 | 13,668 | 1,061 | 1,004 | -5.3 | -52.5 | -58.4 |
| Lumber | 4,672 | 5,528 | 341 | 312 | -15.5 | -3.1 | -23.2 |
| Auto Dealers | 68,412 | 79,328 | 5,268 | 5,745 | -13.8 | -7.4 | -8.3 |
| Service Stations | 12,275 | 12,646 | 1,199 | 1,170 | -2.9 | 9.1 | 4.3 |
| All Other | 32,830 | 31,335 | 2,981 | 3,049 | 4.8 | 25.6 | 9.5 |
| Total | 310,069 | 326,786 | 27,208 | 26,315 | -5.1 | -4.2 | -8.2 |
| **STATE**[a] | | | | | | | |
| **Durable Goods** | 5,120,012 | 5,838,933 | 425,665 | 436,337 | -12.3 | -2.4 | -7.2 |
| Auto Dealers | 3,549,902 | 4,118,974 | 273,086 | 298,348 | -13.8 | -7.9 | -8.3 |
| Accessory Dealers | 301,384 | 311,896 | 26,700 | 24,987 | -3.4 | -0.7 | -6.4 |
| Total Automotive | 3,851,286 | 4,430,870 | 299,786 | 323,335 | -13.1 | -7.3 | -8.2 |
| Furniture | 230,344 | 247,784 | 21,197 | 21,970 | -7.0 | 4.3 | 6.0 |
| Household Appliances | 209,351 | 215,806 | 19,415 | 19,026 | -3.0 | -1.9 | -5.6 |
| Total Furniture and Appliances | 439,695 | 463,590 | 40,612 | 40,996 | -5.2 | 1.2 | 0.3 |
| Lumber and Building Materials | 512,532 | 572,500 | 47,033 | 44,124 | -10.5 | -2.1 | -13.2 |
| Hardware Stores | 57,651 | 58,436 | 4,997 | 4,580 | -1.3 | -6.0 | -10.7 |
| Total Lumber, Building Materials & Hardware | 570,183 | 630,936 | 52,030 | 48,704 | -9.6 | -2.5 | -13.0 |
| **Nondurable Goods** | 9,297,576 | 10,168,561 | 815,692 | 790,709 | -8.6 | 0.0 | 3.9 |
| Apparel | 570,628 | 576,517 | 51,011 | 52,937 | -1.0 | 0.6 | 8.7 |
| Drug Stores | 497,577 | 455,525 | 44,160 | 43,511 | 9.2 | -3.4 | -5.3 |
| Eating and Drinking Places | 1,718,569 | 1,713,713 | 150,359 | 140,109 | 0.3 | 0.0 | -5.8 |
| Food Group | 3,455,652 | 4,306,287 | 279,057 | 260,419 | -19.8 | -1.9 | 2.4 |
| Service Stations | 624,739 | 642,780 | 61,114 | 59,616 | -2.8 | 9.2 | 4.3 |
| General Merchandise Group | 1,739,650 | 1,758,822 | 161,787 | 181,893 | -1.1 | 1.9 | 18.4 |
| **Total Retail Trade** | 14,417,588 | 16,007,494 | 1,241,357 | 1,227,046 | -9.9 | -0.8 | -0.3 |

[a] Total includes data for categories not shown in the table.

## ENID AND LAWTON MSAs
## MUSKOGEE MA

| Category | 11 Mos. '87 | 11 Mos. '86 | Nov. '87 | Percentage Change<br>11 Mos. '87/'86 | Percentage Change<br>Nov./Oct. '87 |
|---|---|---|---|---|---|
| **ENID MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 29,670 | 31,300 | 29,400 | -5.2 | -0.8 |
| Total Employment | 27,570 | 28,800 | 27,675 | -4.3 | -0.4 |
| Unemployment Rate (%) | 7.0 | 7.9 | 5.9 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 1,921 | 1,710 | 195 | 12.4 | -57.0 |
| Number of Units | 20 | 23 | 2 | -13.0 | -50.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 6,000 | 0 | — | 0.0 |
| Number of Units | 0 | 124 | 0 | — | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 487 | 789 | 22 | -38.3 | 83.8 |
| Industrial ($000) | 1,194 | 1,587 | 0 | -24.8 | 0.0 |
| Institutional ($000) | 2,052 | 0 | 0 | — | — |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 264 | 2,958 | 0 | -91.1 | 0.0 |
| All Other Nonbuilding ($000) | 330 | 9 | 12 | E | 10.2 |
| Total Construction ($000) | 6,248 | 13,053 | 229 | -52.1 | -90.9 |
| **LAWTON MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 47,750 | 48,400 | 47,900 | -1.4 | 0.2 |
| Total Employment | 45,350 | 46,000 | 45,600 | -1.4 | 0.0 |
| Unemployment Rate (%) | 5.0 | 5.0 | 4.8 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 17,313 | 20,128 | 910 | -14.0 | -49.3 |
| Number of Units | 266 | 317 | 12 | -16.1 | -53.8 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 400 | 2,119 | 0 | -81.1 | 0.0 |
| Number of Units | 16 | 78 | 0 | -79.5 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 3,613 | 5,394 | 111 | -33.0 | -84.0 |
| Industrial ($000) | 320 | 1,232 | 300 | -74.0 | — |
| Institutional ($000) | 1,400 | 1,638 | 0 | -14.5 | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 712 | 8,525 | 0 | -91.6 | — |
| All Other Nonbuilding ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Total Construction ($000) | 23,759 | 39,035 | 1,321 | -39.1 | -51.1 |
| **MUSKOGEE MA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 32,966 | 33,000 | 33,075 | -0.1 | -0.8 |
| Total Employment | 30,145 | 30,000 | 30,275 | 0.5 | -0.2 |
| Unemployment Rate (%) | 8.5 | 9.1 | 8.5 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 4,922 | 1,008 | 0 | 388.1 | — |
| Number of Units | 66 | 15 | 0 | 340.0 | — |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 1,427 | 2,167 | 0 | -34.1 | 0.0 |
| Number of Units | 35 | 40 | 0 | -12.5 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 8,369 | 253 | 0 | E | — |
| Industrial ($000) | 2,465 | 0 | 0 | — | 0.0 |
| Institutional ($000) | 1,523 | 1,629 | 0 | -6.5 | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 448 | 319 | 369 | 40.3 | — |
| All Other Nonbuilding ($000) | 14 | 15 | 0 | -9.4 | 0.0 |
| Total Construction ($000) | 19,167 | 5,391 | 369 | 255.5 | -32.2 |

Note: Includes revisions.
E = Exceeds 600 percent.

Sources for all tables: Local utilities companies; 10th Federal Reserve District Member Banks; Federal Home Loan Bank of Topeka; Oklahoma Employment Security Commission; United States Department of Commerce, Construction Statistics Division; Oklahoma Department of Transportation, *Progressive Report of the Transportation Director;* Center for Economic and Management Research, College of Business Administration, The University of Oklahoma. The data for all tables were compiled by Marjorie E. Earley, Statistician for CEMR and Brian M. Hickey, Research Assistant.

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**Center for Economic and Management Research**
**University of Oklahoma**
**Norman, Oklahoma 73069**

## OKLAHOMA CITY AND TULSA MSAs

| Category | 11 Mos. '87 | 5 Mos. '86 | Nov. '87 | Percentage Change | |
|---|---|---|---|---|---|
| | | | | 11 Mos. '87/'86 | Nov./Oct. '87 |
| **OKLAHOMA CITY MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 502,873 | 517,600 | 502,200 | -2.8 | 0.0 |
| Total Employment | 467,927 | 482,500 | 476,800 | -3.0 | 0.5 |
| Unemployment Rate (%) | 6.1 | 6.8 | 5.4 | — | — |
| **Mortgage Loans Closed ($000,000)**[a] | 204.8 | 293.9 | 12.8 | -30.3 | -18.0 |
| **Bank Deposits ($000,000)**[b] | | | | | |
| Demand Deposits | 911 | 926 | 862 | 1.6 | 7.0 |
| Time and Savings Deposits | 1,615 | 2,148 | 1,202 | -24.8 | 0.3 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 139,516 | 170,017 | 6,492 | -17.9 | -42.5 |
| Number of Units | 2,206 | 2,813 | 113 | -21.6 | -24.2 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 5,008 | 27,657 | 0 | -81.9 | — |
| Number of Units | 150 | 953 | 0 | -84.3 | — |
| Nonresidential | | | | | |
| Commercial ($000) | 113,932 | 61,335 | 4,810 | 85.8 | -81.0 |
| Industrial ($000) | 3,386 | 4,387 | 100 | -22.8 | -33.3 |
| Institutional ($000) | 18,236 | 8,546 | 560 | 113.4 | -89.8 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 48,133 | 44,997 | 56 | 7.0 | -99.3 |
| All Other Nonbuilding ($000) | 3,971 | 3,067 | 62 | 29.5 | -64.2 |
| Total Construction ($000) | 332,183 | 320,006 | 12,080 | 3.8 | -77.8 |
| **General Business Index** | 89.4 | 84.5 | 92.1 | 5.8 | -0.4 |
| **TULSA MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 357,291 | 357,900 | 355,200 | -0.2 | 2.0 |
| Total Employment | 328,918 | 327,600 | 331,100 | 0.4 | 0.4 |
| Unemployment Rate (%) | 8.0 | 8.5 | 7.3 | — | — |
| **Mortgage Loans Closed ($000,000)**[a] | 246.5 | 277.2 | 14.7 | -11.0 | -29.0 |
| **Bank Deposits ($000,000)**[b] | | | | | |
| Demand Deposits | 849 | 712 | 837 | 19.2 | 0.3 |
| Time and Savings Deposits | 2,298 | 2,018 | 2,186 | 13.9 | -0.2 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 113,882 | 103,372 | 8,202 | 10.2 | -2.3 |
| Number of Units | 1,632 | 1,649 | 113 | -1.0 | 0.9 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 11,282 | 32,485 | 0 | -65.3 | 0.0 |
| Number of Units | 526 | 876 | 0 | -40.0 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 20,379 | 48,583 | 1,844 | -58.1 | 107.5 |
| Industrial ($000) | 12,084 | 9,554 | 318 | 26.5 | -86.2 |
| Institutional ($000) | 16,104 | 24,466 | 4,051 | -34.2 | 265.3 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 30,888 | 18,490 | 7,503 | 67.1 | 10.2 |
| All Other Nonbuilding ($000) | 3,866 | 5,569 | 196 | -30.6 | 133.0 |
| Total Construction ($000) | 208,483 | 242,519 | 22,113 | -14.0 | 12.9 |
| **General Business Index** | 87.3 | 85.6 | 87.0 | 2.0 | -1.8 |

Note: Includes revisions.

[a] By Savings and Loan Associations.

[b] Total deposits of large commercial banks.

## CONSTRUCTION, STATE

| Category | 11 Mos. '87 | 11 Mos. '86 | Nov. '87 | Percentage Change | |
|---|---|---|---|---|---|
| | | | | 11 Mos. '87/'86 | Nov./Oct. '87 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 305,370 | 319,113 | 17,136 | -4.3 | -33.5 |
| Number of Units | 4,541 | 5,170 | 256 | -12.2 | -23.8 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 22,129 | 73,131 | 0 | -69.7 | — |
| Number of Units | 877 | 2,202 | 0 | -60.2 | — |
| Nonresidential | | | | | |
| Commercial ($000) | 165,360 | 133,412 | 7,795 | 23.9 | -72.6 |
| Industrial ($000) | 20,557 | 19,517 | 718 | 5.3 | -77.2 |
| Institutional ($000) | 47,408 | 50,259 | 4,631 | -5.7 | -57.4 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 198,459 | 172,895 | 28,730 | 14.8 | -22.2 |
| All Other Nonbuilding ($000) | 8,542 | 9,827 | 269 | -13.1 | 0.1 |
| Total Construction ($000) | 767,825 | 710,592 | 59,279 | 8.1 | -45.9 |

Note: Includes revisions.

U 8130-1A

# OKLAHOMA BUSINESS BULLETIN

CENTER FOR ECONOMIC AND MANAGEMENT RESEARCH
COLLEGE OF BUSINESS ADMINISTRATION
THE UNIVERSITY OF OKLAHOMA

February 1988 VOL. 56, ISSUE 2

## ERRATA

### RETAIL TRADE IN SELECTED CITIES
($000)

| | Nov. '87 | | Adjusted | |
|---|---|---|---|---|
| | | | '87/'86 | 1987 |
| City | Adjusted | Unadjusted | 11 Mos. | Nov./Oct. |
| Ada | 12,757 | 12,499 | -6.0 | -6.2 |
| Altus | 10,986 | 11,096 | -9.9 | -8.4 |
| Alva[a] | 3,509 | 3,465 | -6.1 | -0.6 |
| Anadarko | 4,585 | 4,430 | -13.1 | -3.0 |
| Ardmore | 17,292 | 17,206 | -6.1 | -4.8 |
| Bartlesville | 18,293 | 18,544 | -5.8 | 2.7 |
| Blackwell | 2,756 | 2,806 | -12.6 | -4.8 |
| Broken Arrow | 18,392 | 18,049 | -7.3 | 7.9 |
| Chickasha | 8,547 | 8,515 | -7.7 | -0.4 |
| Clinton | 5,601 | 5,645 | -8.1 | -3.3 |
| Cushing | 5,271 | 5,123 | -12.1 | -0.8 |
| Del City | 10,160 | 9,655 | 8.9 | -4.3 |
| Duncan | 13,293 | 13,632 | -8.7 | 2.0 |
| Durant | 8,742 | 8,524 | 0.0 | -8.1 |
| Edmond | 24,079 | 23,898 | -12.5 | 7.0 |
| Elk City | 7,048 | 6,950 | -10.3 | 1.0 |
| El Reno | 6,929 | 7,200 | -9.8 | -4.4 |
| Guthrie | 5,344 | 5,388 | -10.4 | 9.5 |
| Guymon | 4,131 | 4,036 | -10.1 | -3.4 |
| Henryetta[a] | 3,037 | 2,992 | -27.2 | -0.4 |
| Hobart | 1,945 | 2,038 | -10.6 | -11.5 |
| Holdenville | 2,274 | 2,398 | -10.4 | -10.4 |
| Hugo | 2,325 | 2,264 | -10.1 | -10.0 |
| Idabel | 3,613 | 3,667 | -10.4 | 2.3 |
| Lawton | 48,788 | 49,993 | -0.9 | 1.2 |
| McAlester | 8,424 | 8,548 | -8.3 | -9.5 |
| Miami | 10,969 | 10,480 | -7.6 | -3.2 |
| Midwest City | 32,098 | 33,902 | -7.0 | 0.4 |
| Moore | 13,046 | 13,341 | -0.8 | -0.9 |
| Muskogee | 25,399 | 25,232 | -3.9 | -8.8 |
| Norman | 53,659 | 54,581 | -9.2 | -0.3 |
| Oklahoma City | 263,400 | 271,351 | -4.3 | 3.1 |
| Okmulgee[a] | 4,899 | 4,929 | -10.6 | 1.0 |
| Pauls Valley | 4,271 | 4,225 | -7.1 | 6.2 |
| Pawhuska | 1,837 | 1,764 | -13.7 | 36. 7 |
| Ponca City | 14,807 | 14,803 | -3.1 | -2.9 |
| Poteau | 3,945 | 4,166 | -9.6 | -3.1 |
| Sand Springs | 8,470 | 8,303 | -2.9 | 2.1 |
| Sapulpa | 11,045 | 11,239 | -9.3 | -4.0 |
| Seminole | 5,082 | 5,242 | -11.7 | -2.4 |
| Shawnee | 23,951 | 24,141 | -2.6 | -0.4 |
| Stillwater | 22,697 | 22,416 | 2.1 | -4.8 |
| Tahlequah | 7,169 | 7,018 | -2.1 | -0.8 |
| Tulsa | 223,596 | 225,222 | -5.9 | -0.5 |
| Watonga | 1,790 | 1,816 | -7.1 | 2.2 |
| Weatherford | 4,707 | 4,757 | -11.8 | -7.3 |
| Wewoka | 982 | 976 | -8.7 | -10.4 |
| Woodward | 10,430 | 10,588 | -9.1 | -0.9 |
| **Total** | 1,006,370 | 1,019,053 | -5.7 | -0.0 |

[a] Revised

Please replace the city Retail Sales table which appears in your February, 1988 issue of the *Oklahoma Business Bulletin* which contains errors in the percentage change columns. We apologize for this inconvenience.

Neil J. Dikeman, Jr.
Associate Director

Center for Economic and Management Research
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Norman, Oklahoma 73069

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# OKLAHOMA BUSINESS BULLETIN

CENTER FOR ECONOMIC AND MANAGEMENT RESEARCH
COLLEGE OF BUSINESS ADMINISTRATION
THE UNIVERSITY OF OKLAHOMA

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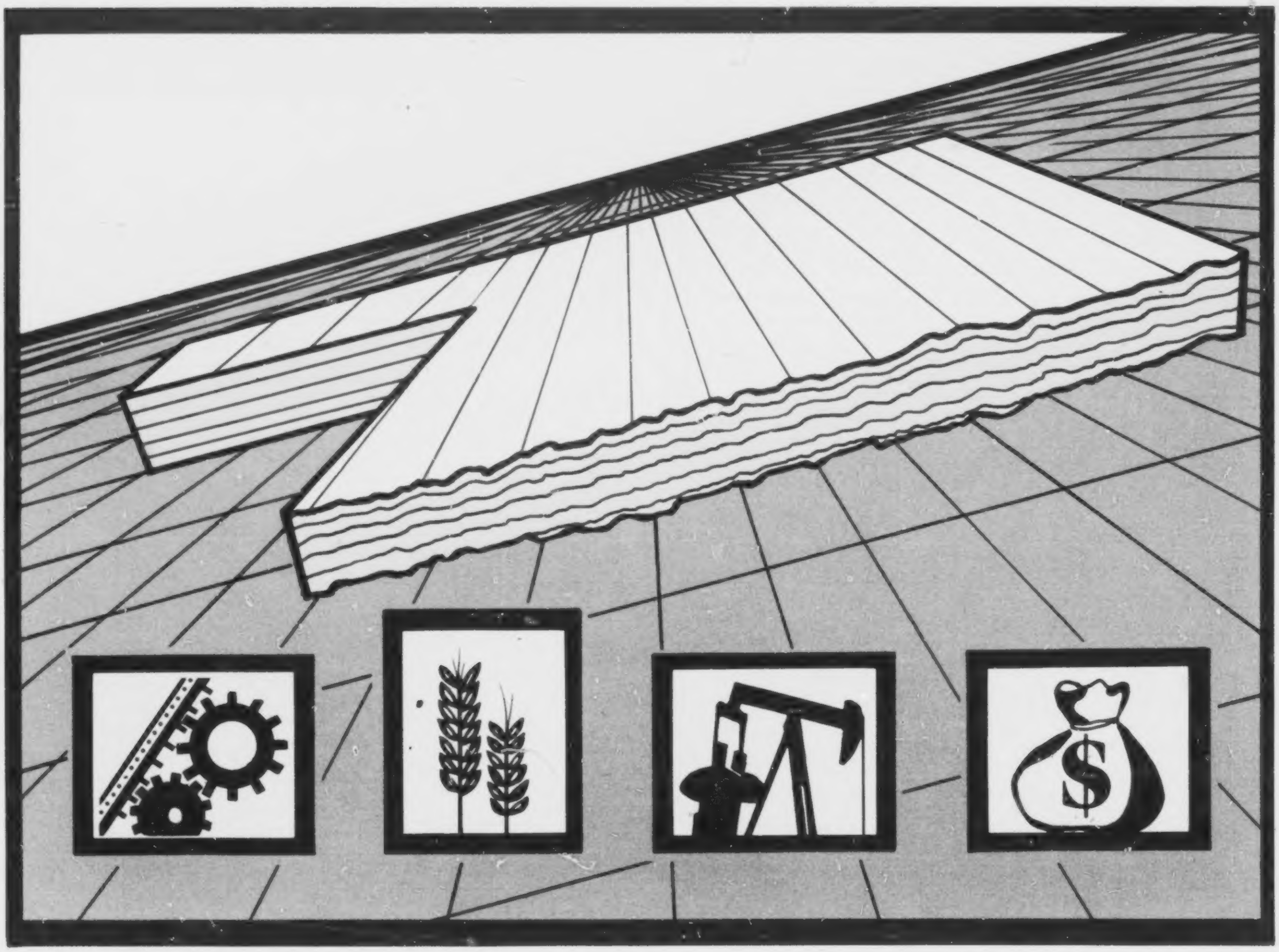

The *Oklahoma Business Bulletin* is now combined with the *Review of Regional Economics and Business*. There will be four quarterly expanded editions of the *Bulletin* which will contain both articles and the usual statistical information on Oklahoma and its major centers. The remaining eight monthly issues of the *Bulletin* will contain only the statistical summaries, although articles on timely subjects might also appear in these interquarterly issues. The combination of these two publications will provide a more thorough examination of economic problems prevalent in Oklahoma as well as continuing to provide economic data which has long been presented in the *Oklahoma Business Bulletin*.

This publication change at the Center has been assisted by funding provided by the Robert S. and Grayce B. Kerr Foundation Inc., for which the Center is most grateful.

We at the Center are most hopeful that the Oklahoma oriented articles will assist State leaders and citizens in their efforts to solve the economic problems now facing the State.

George W. England
Director

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Manuscripts for consideration should be typed, double-spaced, and submitted in duplicate. Each submitted manuscript is reviewed by at least two members of the Editorial Review Board and a decision is usually reached in four to six weeks.

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## SUMMARY OF INDICATORS

| Category | 12 Mos. '87 | 12 Mos. '86 | Dec. '87 | Percentage Change<br>12 Mos. '87/'86 | Percentage Change<br>Dec./Nov. '87 |
|---|---|---|---|---|---|
| **Personal Income (Monthly Average)**[a] | | | | | |
| Unadjusted ($000,000) | 3,448 | 3,391 | 3,547 | 1.7 | 0.7 |
| Adjusted for CPI ($000,000) | 1,013 | 1,032 | 1,026 | -1.9 | 0.8 |
| **Crude Oil Production (000 bbl)**[b] | 132,035 | 143,075 | 9,521 | -7.7 | -11.0 |
| **Industrial Power Sales (000,000 Kwh)**[c] | 8,216 | 8,069 | 685 | 1.8 | 0.0 |
| **Total Bank Deposits ($000,000)**[d] | | | | | |
| Demand | 7,518 | 7,384 | 7,569 | 1.8 | 1.6 |
| Savings | 25,324 | 26,257 | 24,567 | -3.6 | -0.5 |
| **Savings and Loan Associations ($000,000)** | | | | | |
| Assets | 10,031.2 | 10,047.2 | 10,130.4 | -0.2 | 0.3 |
| Mortgage Loans Closed | 902.9 | 1,399.7 | 52.4 | -35.5 | 8.9 |
| **General Business Index** | 94.1 | 91.1 | 94.9 | 3.3 | 0.3 |

[a] Includes revisions.
[b] 12 months data.
[c] Sales of larger privately owned utility companies.
[d] Total deposits of all depository institutions.

## SELECTED ECONOMIC INDICATORS

| Category | 12 Mos. '87 | 12 Mos. '86 | Dec. '87 | Percentage Change<br>12 Mos. '87/'86 | Percentage Change<br>Dec./Nov. '87 |
|---|---|---|---|---|---|
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 319,249 | 353,930 | 12,648 | -9.8 | -30.3 |
| Number of Units | 4,734 | 5,833 | 177 | -18.8 | -34.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 23,302 | 77,578 | 1,174 | -70.0 | — |
| Number of Units | 932 | 2,412 | 55 | -61.4 | — |
| Nonresidential | | | | | |
| Commercial ($000) | 177,666 | 150,574 | 9,014 | 18.0 | -20.3 |
| Industrial ($000) | 21,212 | 37,912 | 675 | -44.1 | -17.0 |
| Institutional ($000) | 48,653 | 57,198 | 685 | -14.9 | -86.8 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 208,267 | 182,057 | 6,924 | 14.4 | -78.1 |
| All Other Nonbuilding ($000) | 8,796 | 10,972 | 207 | -19.8 | -32.6 |
| Total Construction ($000) | 807,145 | 870,221 | 31,327 | -7.2 | -53.7 |
| **EMPLOYMENT TRENDS** | | | | | |
| Total Labor Force (000)[a] | 1,564.0 | 1,593.0 | 1,546.5 | -1.8 | 0.2 |
| Total Employment (000) | 1,449.0 | 1,462.0 | 1,453.6 | -0.9 | 0.5 |
| Agriculture (000) P | 37.2 | 41.1 | 37.3 | -9.4 | 9.7 |
| Nonagriculture (000) | 1,411.8 | 1,420.9 | 1,416.3 | -0.6 | 0.3 |
| Manufacturing (000) | 158.7 | 162.8 | 159.6 | -2.5 | -0.2 |
| Mining (000) | 53.5 | 55.1 | 54.4 | -2.9 | 0.0 |
| Government (000) | 251.4 | 251.2 | 254.8 | 0.1 | 0.0 |
| Contract Construction (000) | 39.5 | 40.0 | 39.7 | -1.2 | -1.2 |
| Services (000) | 227.2 | 224.5 | 227.5 | 1.2 | -0.1 |
| Retail Trade (000) | 213.7 | 217.1 | 216.0 | -1.6 | 0.9 |
| Unemployment Rate (%) | 7.4 | 8.2 | 6.0 | — | — |
| **Average Weekly Hours** | | | | | |
| Manufacturing (Per Worker) | 41.2 | 41.3 | 41.8 | -0.3 | 0.2 |
| **Average Weekly Earnings** | | | | | |
| Manufacturing ($ Per Worker) | 413.63 | 404.74 | 428.87 | 2.2 | 1.7 |
| Contract Construction ($ Per Worker) | 429.21 | 408.01 | 411.06 | 5.2 | -6.5 |
| Retail Trade Excluding Eating and Drinking Places($ Per Worker) | 190.33 | 188.79 | 183.26 | 0.8 | -1.1 |

Note: Includes revisions in some previous months. Streets and highways data reflect construction started in current month(s). Wage and salary employment data preliminary.

[a] Civilian Labor Force.

## RETAIL TRADE IN METRO AREAS AND STATE
($000)

| | | | | | Percentage Change | | |
|---|---|---|---|---|---|---|---|
| | 12 Mos. '87 | 12 Mos. '86 | Dec. '87 | | 12 Mos. '87/'86 | Dec./Nov. '87 | |
| Retail Trade | Adjusted | Adjusted | Adjusted | Unadjusted | Adjusted | Adjusted | Unadjusted |
| **OKLAHOMA CITY MSA** | | | | | | | |
| Food | 2,271,470 | 2,284,471 | 189,072 | 192,377 | -0.6 | -11.0 | -4.6 |
| Apparel | 175,888 | 186,964 | 14,664 | 25,191 | -5.9 | 0.5 | 64.1 |
| General Merchandise | 715,930 | 722,638 | 63,161 | 111,018 | -0.9 | -2.0 | 61.3 |
| Furniture | 287,983 | 273,664 | 24,364 | 29,715 | 5.2 | -7.3 | 8.8 |
| Lumber | 169,098 | 197,294 | 14,583 | 10,893 | -14.3 | 13.3 | -9.5 |
| Auto Dealers | 1,553,042 | 1,810,085 | 123,421 | 116,536 | -14.2 | 11.9 | -2.4 |
| Service Stations | 205,464 | 211,672 | 15,470 | 15,137 | -2.9 | -16.1 | -16.6 |
| All Other | 716,753 | 702,637 | 70,352 | 99,811 | 2.0 | 15.5 | 70.6 |
| Total | 6,095,628 | 6,389,425 | 515,087 | 600,678 | -4.6 | -1.0 | 15.2 |
| **TULSA MSA** | | | | | | | |
| Food | 1,326,153 | 1,350,491 | 109,212 | 116,169 | -1.8 | -2.0 | 10.8 |
| Apparel | 166,348 | 169,835 | 12,418 | 21,286 | -2.1 | -7.4 | 44.3 |
| General Merchandise | 594,572 | 592,235 | 55,309 | 85,260 | 0.4 | 4.0 | 58.1 |
| Furniture | 229,165 | 244,332 | 17,119 | 20,984 | -6.2 | -24.4 | -0.6 |
| Lumber | 139,444 | 161,385 | 11,932 | 10,256 | -13.6 | 2.7 | -8.7 |
| Auto Dealers | 903,630 | 1,053,191 | 71,812 | 67,805 | -14.2 | 11.9 | -2.4 |
| Service Stations | 168,792 | 173,906 | 12,709 | 12,436 | -2.9 | -16.1 | -16.6 |
| All Other | 71,527 | 81,351 | 8,368 | 14,868 | -12.1 | 136.1 | 151.1 |
| Total | 3,599,631 | 3,826,726 | 298,879 | 349,064 | -5.9 | 1.3 | 17.9 |
| **ENID MSA** | | | | | | | |
| Food | 112,563 | 116,338 | 9,223 | 9,659 | -3.2 | -1.3 | 6.4 |
| Apparel | 17,972 | 18,307 | 1,358 | 2,025 | -1.8 | -8.3 | 42.7 |
| General Merchandise | 48,877 | 48,589 | 4,300 | 7,545 | 0.6 | 1.5 | 69.6 |
| Furniture | 12,022 | 11,956 | 992 | 1,148 | 0.6 | -12.1 | 5.7 |
| Lumber | 15,790 | 17,635 | 1,112 | 747 | -10.5 | -19.3 | -50.9 |
| Auto Dealers | 88,888 | 103,587 | 7,064 | 6,670 | -14.2 | 11.9 | -2.4 |
| Service Stations | 15,147 | 15,609 | 1,133 | 1,116 | -3.0 | -16.8 | -16.6 |
| All Other | 36,176 | 33,958 | 3,457 | 5,142 | 6.5 | 15.6 | 74.6 |
| Total | 347,435 | 365,979 | 28,639 | 34,052 | -5.1 | 1.4 | 18.8 |
| **LAWTON MSA** | | | | | | | |
| Food | 191,901 | 186,917 | 16,293 | 15,941 | 2.7 | -2.2 | 1.3 |
| Apparel | 21,691 | 20,486 | 1,695 | 2,745 | 5.9 | -1.7 | 61.4 |
| General Merchandise | 140,834 | 121,455 | 12,385 | 20,346 | 16.0 | 1.7 | 58.1 |
| Furniture | 27,090 | 31,498 | 2,150 | 2,500 | -14.0 | -19.9 | -5.7 |
| Lumber | 21,747 | 23,137 | 2,039 | 1,551 | -6.0 | -35.8 | -52.3 |
| Auto Dealers | 118,454 | 138,064 | 9,413 | 8,888 | -14.2 | 11.9 | -2.4 |
| Service Stations | 10,340 | 10,643 | 773 | 762 | -2.8 | -16.9 | -16.6 |
| All Other | 44,213 | 47,968 | 6,109 | 4,775 | -7.8 | 61.2 | 19.9 |
| Total | 576,270 | 580,168 | 50,857 | 57,508 | -0.7 | 2.7 | 14.5 |
| **MUSKOGEE AREA** | | | | | | | |
| Food | 133,762 | 140,465 | 11,088 | 10,744 | -4.8 | 2.6 | 10.9 |
| Apparel | 19,774 | 19,225 | 1,761 | 2,736 | 2.9 | -2.2 | 64.4 |
| General Merchandise | 42,871 | 41,661 | 4,189 | 7,099 | 2.9 | 11.9 | 92.5 |
| Furniture | 14,036 | 14,865 | 1,049 | 1,282 | -5.6 | -2.2 | 27.7 |
| Lumber | 5,023 | 6,073 | 334 | 287 | -17.3 | -1.5 | -8.0 |
| Auto Dealers | 74,718 | 87,103 | 5,939 | 5,606 | -14.2 | 11.9 | -2.4 |
| Service Stations | 13,254 | 13,674 | 995 | 975 | -3.1 | -16.3 | -16.7 |
| All Other | 36,438 | 34,763 | 3,485 | 4,542 | 4.8 | 16.6 | 49.0 |
| Total | 339,876 | 357,829 | 28,840 | 33,271 | -5.0 | 5.8 | 26.4 |
| **STATE** | | | | | | | |
| Durable Goods[a] | 5,577,368 | 6,378,409 | 442,017 | 444,847 | -12.6 | 5.3 | 2.0 |
| Auto Dealers | 3,880,472 | 4,523,312 | 308,358 | 291,159 | -14.2 | 11.9 | -2.4 |
| Accessory Dealers | 327,590 | 338,581 | 26,252 | 27,246 | -3.2 | -1.3 | 9.0 |
| Total Automotive | 4,208,062 | 4,861,893 | 334,610 | 318,405 | -13.4 | 10.7 | -1.5 |
| Furniture | 250,579 | 268,710 | 20,322 | 23,317 | -6.7 | -4.2 | 6.1 |
| Household Appliances | 229,118 | 236,227 | 19,548 | 23,411 | -3.0 | 0.8 | 23.0 |
| Total Furniture and Appliances | 479,697 | 504,937 | 39,870 | 46,728 | -5.0 | -1.8 | 14.0 |
| Lumber and Building Materials | 559,651 | 631,257 | 47,605 | 37,686 | -11.3 | 2.9 | -14.6 |
| Hardware Stores | 63,188 | 63,743 | 5,498 | 6,049 | -0.9 | 9.5 | 32.1 |
| Total Lumber, Building Materials & Hardware | 622,839 | 695,000 | 53,103 | 43,735 | -10.4 | 3.5 | -10.2 |
| **Nondurable Goods[a]** | 10,028,103 | 11,032,443 | 763,301 | 942,488 | -9.1 | -5.4 | 19.2 |
| Apparel | 619,776 | 630,437 | 49,393 | 82,338 | -1.7 | -2.7 | 55.5 |
| Drug Stores | 537,993 | 498,698 | 41,074 | 53,649 | 7.9 | -6.3 | 23.3 |
| Eating and Drinking Places | 1,862,482 | 1,874,283 | 145,920 | 137,405 | -0.6 | -2.6 | -1.9 |
| Food Group | 3,705,905 | 4,685,807 | 256,026 | 269,924 | -20.9 | -7.3 | 3.6 |
| Service Stations | 674,703 | 695,107 | 50,468 | 49,704 | -2.9 | -16.9 | -16.6 |
| General Merchandise Group | 1,896,513 | 1,910,299 | 157,660 | 281,261 | -0.7 | -1.8 | 54.6 |
| **Total Retail Trade** | 15,605,471 | 17,410,852 | 1,205,318 | 1,387,335 | -10.4 | -1.7 | 13.1 |

---

[a] Includes data for categories not shown in the table.

## RETAIL TRADE IN SELECTED CITIES
($000)

| | | | | | Percentage Change | | |
|---|---|---|---|---|---|---|---|
| | 12 Mos. '87 | 12 Mos. '86 | Dec. '87 | | 12 Mos. '87/'86 | Dec./Nov. '87 | |
| Retail Trade | Adjusted | Adjusted | Adjusted | Unadjusted | Adjusted | Adjusted | Unadjusted |
| Ada | 159,190 | 169,748 | 12,852 | 15,350 | -6.2 | 0.1 | 22.8 |
| Altus | 141,446 | 157,259 | 11,260 | 13,204 | -10.1 | 2.8 | 19.0 |
| Alva | 43,216 | 46,277 | 3,271 | 3,838 | -6.6 | -6.1 | 10.8 |
| Anadarko | 54,479 | 62,495 | 4,543 | 5,226 | -12.8 | -1.6 | 18.0 |
| Ardmore | 216,736 | 229,836 | 18,691 | 22,289 | -5.7 | 7.2 | 29.5 |
| Bartlesville | 220,177 | 234,965 | 17,417 | 21,357 | -6.3 | -4.3 | 15.2 |
| Blackwell | 34,897 | 39,845 | 2,845 | 3,308 | -12.4 | 3.4 | 17.9 |
| Broken Arrow | 208,851 | 224,082 | 18,062 | 19,454 | -6.8 | -0.8 | 7.8 |
| Chickasha | 103,803 | 112,160 | 8,456 | 9,770 | -7.5 | -0.8 | 14.7 |
| Clinton | 69,847 | 76,393 | 5,628 | 6,108 | -8.6 | -0.0 | 8.2 |
| Cushing | 62,207 | 70,310 | 5,228 | 6,116 | -11.5 | -0.2 | 19.4 |
| Del City | 129,525 | 119,206 | 10,287 | 10,241 | 8.7 | 1.9 | 6.1 |
| Duncan | 155,374 | 170,373 | 13,184 | 15,189 | -8.8 | 0.1 | 11.4 |
| Durant | 117,265 | 118,192 | 9,480 | 11,381 | -0.8 | 7.4 | 33.5 |
| Edmond | 254,095 | 294,445 | 17,536 | 19,421 | -13.7 | -28.1 | -18.7 |
| Elk City | 83,316 | 92,636 | 6,819 | 7,729 | -10.1 | -2.8 | 11.2 |
| El Reno | 85,992 | 95,476 | 6,710 | 7,416 | -9.9 | -2.2 | 3.0 |
| Guthrie | 58,392 | 65,224 | 4,657 | 4,928 | -10.5 | -12.1 | -8.5 |
| Guymon | 50,097 | 56,206 | 3,608 | 4,386 | -10.9 | -12.0 | 8.7 |
| Henryetta | 42,065 | 58,814 | 2,809 | 3,178 | -28.5 | -7.7 | 6.2 |
| Hobart | 26,149 | 29,331 | 2,013 | 2,234 | -10.8 | 2.0 | 9.6 |
| Holdenville | 30,643 | 34,178 | 2,427 | 2,787 | -10.3 | 5.9 | 16.2 |
| Hugo | 31,181 | 34,435 | 2,645 | 3,040 | -9.4 | 12.5 | 34.3 |
| Idabel | 43,145 | 48,270 | 3,398 | 3,833 | -10.6 | -5.4 | 4.5 |
| Lawton | 548,071 | 545,807 | 47,918 | 55,070 | 0.4 | 0.2 | 14.9 |
| McAlester | 110,950 | 120,771 | 9,199 | 10,688 | -8.1 | 8.9 | 25.0 |
| Miami | 128,705 | 140,510 | 9,880 | 12,138 | -8.4 | -6.8 | 15.8 |
| Midwest City | 393,166 | 424,997 | 33,206 | 38,362 | -7.5 | 2.3 | 13.2 |
| Moore | 157,677 | 159,159 | 13,607 | 15,165 | -0.9 | 3.7 | 13.7 |
| Muskogee | 324,946 | 337,803 | 27,567 | 31,971 | -3.8 | 7.8 | 26.7 |
| Norman | 667,681 | 736,236 | 53,896 | 60,589 | -9.3 | -1.0 | 11.0 |
| Oklahoma City | 3,128,151 | 3,256,400 | 271,818 | 327,350 | -3.9 | 2.7 | 20.6 |
| Okmulgee | 59,822 | 66,996 | 4,598 | 5,109 | -10.7 | -5.1 | 3.7 |
| Pauls Valley | 44,944 | 48,432 | 3,456 | 4,017 | -7.2 | -20.0 | -4.9 |
| Pawhuska | 18,464 | 21,835 | 1,305 | 1,549 | -15.4 | -29.0 | -12.2 |
| Ponca City | 179,126 | 184,678 | 14,754 | 17,870 | -3.0 | -0.2 | 20.7 |
| Poteau | 49,733 | 54,903 | 4,022 | 4,669 | -9.4 | 2.0 | 12.1 |
| Sand Springs | 97,035 | 99,953 | 8,860 | 9,689 | -2.9 | 3.6 | 16.7 |
| Sapulpa | 141,449 | 155,678 | 11,520 | 13,040 | -9.1 | 3.2 | 16.0 |
| Seminole | 65,166 | 74,038 | 4,792 | 5,653 | -12.0 | -5.0 | 7.8 |
| Shawnee | 276,587 | 284,455 | 23,381 | 26,448 | -2.8 | -2.1 | 9.6 |
| Stillwater | 272,888 | 267,704 | 23,469 | 26,060 | 1.9 | 3.4 | 16.3 |
| Tahlequah | 87,776 | 90,217 | 7,038 | 7,490 | -2.7 | -1.5 | 6.7 |
| Tulsa | 2,729,005 | 2,913,405 | 232,059 | 273,679 | -6.3 | 2.9 | 21.5 |
| Watonga | 20,149 | 21,745 | 1,527 | 1,784 | -7.3 | -14.1 | -1.8 |
| Weatherford | 60,076 | 67,791 | 4,685 | 5,460 | -11.4 | 1.0 | 14.8 |
| Wewoka | 12,889 | 14,220 | 945 | 1,014 | -9.4 | -3.1 | 3.9 |
| Woodward | 124,760 | 137,340 | 9,852 | 11,374 | -9.2 | -4.8 | 7.4 |
| **Total Selected Cities** | 12,121,304 | 12,865,229 | 1,017,180 | 1,188,021 | -5.8 | 0.8 | 16.8 |

## ENID AND LAWTON MSAs

| Category | 12 Mos. '87 | 12 Mos. '86 | Dec. '87 | Percentage Change<br>12 Mos. '87/'86 | Percentage Change<br>Dec./Nov. '87 |
|---|---|---|---|---|---|
| **ENID MSA** | | | | | |
| **Employment (Number)**[a] | | | | | |
| Labor Force | 30,400 | 31,200 | 30,225 | -2.6 | 0.8 |
| Total Employment | 28,300 | 28,725 | 28,600 | -1.5 | 1.1 |
| Unemployment Rate (%) | 6.9 | 7.9 | 5.4 | — | — |
| **Industrial Power Sales (000 Kwh)** | 458,055 | 463,044 | 36,766 | -1.1 | -9.0 |
| **PERMIT-AUTHORIZED CONSTRUCTION**[a] | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 2,233 | 1,710 | 312 | 30.6 | 60.0 |
| Number of Units | 22 | 23 | 2 | -4.3 | 0.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 6,000 | 0 | — | 0.0 |
| Number of Units | 0 | 124 | 0 | — | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 492 | 995 | 5 | -50.6 | -77.5 |
| Industrial ($000) | 1,194 | 1,587 | 0 | -24.8 | 0.0 |
| Institutional ($000) | 2,052 | 0 | 0 | — | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 264 | 2,958 | 0 | -91.1 | 0.0 |
| All Other Nonbuilding ($000) | 336 | 9 | 6 | E | -51.7 |
| Total Construction ($000) | 6,571 | 13,259 | 323 | -50.4 | 40.8 |
| **LAWTON MSA** | | | | | |
| **Employment (Number)**[a] | | | | | |
| Labor Force | 49,775 | 48,425 | 50,200 | 2.8 | 1.3 |
| Total Employment | 47,325 | 46,050 | 47,950 | 2.8 | 1.5 |
| Unemployment Rate (%) | 4.9 | 5.0 | 4.5 | — | — |
| **Industrial Power Sales (000 Kwh)** | 196,066 | 187,473 | 15,752 | 4.6 | 0.9 |
| **PERMIT-AUTHORIZED CONSTRUCTION**[a] | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 17,942 | 21,553 | 629 | -16.8 | -30.9 |
| Number of Units | 276 | 344 | 10 | -19.8 | -16.7 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 740 | 2,119 | 340 | -65.1 | — |
| Number of Units | 40 | 78 | 24 | -48.7 | — |
| Nonresidential | | | | | |
| Commercial ($000) | 3,913 | 5,601 | 300 | -30.1 | 171.5 |
| Industrial ($000) | 320 | 1,232 | 0 | -74.0 | — |
| Institutional ($000) | 1,400 | 1,638 | 0 | -14.5 | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 817 | 8,525 | 0 | -90.4 | — |
| All Other Nonbuilding ($000) | 0 | 17 | 0 | — | 0.0 |
| Total Construction ($000) | 25,133 | 40,684 | 1,269 | -38.2 | -11.0 |

[a] Includes revisions.

E = exceeds 600 percent.

## MUSKOGEE MA

| Category | 12 Mos. '87 | 12 Mos. '86 | Dec. '87 | Percentage Change<br>12 Mos. '87/'86 | Percentage Change<br>Dec./Nov. '87 |
|---|---|---|---|---|---|
| **Employment (Number)**[a] | | | | | |
| Labor Force | 32,875 | 33,000 | 33,050 | -0.4 | 1.1 |
| Total Employment | 30,025 | 30,000 | 30,275 | 0.1 | 1.3 |
| Unemployment Rate (%) | 8.7 | 9.1 | 8.4 | — | — |
| **Industrial Power Sales (000 Kwh)** | 190,701 | 167,362 | 13,705 | 13.9 | -9.7 |
| **PERMIT-AUTHORIZED CONSTRUCTION**[a] | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 4,992 | 2,381 | 0 | 106.7 | 0.0 |
| Number of Units | 66 | 49 | 0 | 34.7 | 0.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 1,427 | 3,017 | 0 | -52.7 | 0.0 |
| Number of Units | 35 | 88 | 0 | -60.2 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 8,369 | 328 | 0 | E | 0.0 |
| Industrial ($000) | 2,465 | 532 | 0 | 363.3 | 0.0 |
| Institutional ($000) | 1,523 | 1,629 | 0 | -6.5 | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 448 | 894 | 0 | -49.9 | — |
| All Other Nonbuilding ($000) | 14 | 25 | 0 | -44.8 | 0.0 |
| Total Construction ($000) | 19,167 | 8,805 | 0 | 117.7 | — |

[a] Includes revisions.

E = Exceeds 600 percent.

## TULSA MSA

| | | | | Percentage Change | |
|---|---|---|---|---|---|
| Category | 12 Mos. '87 | 12 Mos. '86 | Dec. '87 | 12 Mos. '87/'86 | Dec./Nov. '87 |
| **Employment (Number)**[a] | | | | | |
| Labor Force | 348,200 | 357,900 | 342,500 | -2.7 | -0.2 |
| Total Employment | 319,500 | 327,600 | 318,900 | -2.5 | 0.4 |
| Manufacturing | 49,775 | 51,200 | 50,300 | -2.8 | 1.7 |
| Mining | 17,108 | 17,725 | 17,300 | -3.5 | 0.0 |
| Government | 35,933 | 36,900 | 36,300 | -2.6 | 0.2 |
| Wholesale and Retail Trade | 73,808 | 72,900 | 75,100 | 1.2 | 1.2 |
| Unemployment Rate (%) | 8.2 | 8.4 | 6.9 | — | — |
| **Average Weekly Earnings** | | | | | |
| Manufacturing ($ Per Worker) | 439.07 | 417.50 | 463.97 | 5.2 | 1.9 |
| **Industrial Power Sales (000 Kwh)** | 2,099,207 | 1,987,599 | 172,691 | 5.6 | -3.9 |
| **Mortgage Loans Closed ($000,000)**[b] | NA | NA | NA | — | — |
| **Bank Deposits ($000,000)**[c] | | | | | |
| Demand Deposits | 853 | 712 | 897 | 19.4 | 7.2 |
| Time and Savings Deposits | 2,290 | 2,032 | 2,197 | 12.7 | 0.5 |
| **Air Transportation** | | | | | |
| Passengers Enplaning (Number) | 1,397,864 | 1,374,788 | 111,460 | 1.7 | 2.4 |
| Passengers Deplaning (Number) | 1,414,525 | 1,377,601 | 107,518 | 2.7 | -1.7 |
| Freight (Tons) | 16,391 | 10,056 | 1,632 | 63.0 | 25.3 |
| **Water Transportation** | | | | | |
| Tulsa Port of Catoosa | | | | | |
| Tons In | 537,318 | 470,027 | 50,754 | 14.3 | 11.2 |
| Tons Out | 1,274,220 | 941,611 | 130,059 | 35.3 | 8.3 |
| **PERMIT-AUTHORIZED CONSTRUCTION**[a] | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 120,293 | 113,215 | 5,482 | 6.3 | -40.0 |
| Number of Units | 1,721 | 1,798 | 78 | -4.3 | -37.1 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 11,356 | 32,555 | 74 | -65.1 | — |
| Number of Units | 528 | 878 | 2 | -39.9 | — |
| Nonresidential | | | | | |
| Commercial ($000) | 26,516 | 50,328 | 6,043 | -47.3 | 227.7 |
| Industrial ($000) | 12,084 | 14,623 | 0 | -17.4 | — |
| Institutional ($000) | 16,533 | 24,726 | 429 | -33.1 | -89.4 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 30,888 | 18,953 | 0 | 63.0 | — |
| All Other Nonbuilding ($000) | 3,996 | 5,795 | 130 | -31.0 | -33.5 |
| Total Construction | 221,665 | 260,195 | 12,158 | -14.8 | -47.2 |
| **General Business Index** | 87.3 | 85.7 | 87.9 | 1.8 | 1.0 |

Note: Wage and salary employment data preliminary.

[a] Includes revisions.

[b] By Savings and Loan Associations.

[c] Deposits of large commercial banks.

NA = Not Available.

## OKLAHOMA CITY MSA

| Category | 12 Mos. '87 | 12 Mos. '86 | Dec. '87 | Percentage Change | |
|---|---|---|---|---|---|
| | | | | 12 Mos. '87/'86 | Dec./Nov. '87 |
| **Employment (Number)**[a] | | | | | |
| Labor Force | 508,900 | 517,200 | 504,000 | -1.6 | 0.0 |
| Total Employment | 478,400 | 482,300 | 479,100 | -0.8 | 0.4 |
| Manufacturing | 48,617 | 50,000 | 48,300 | -2.8 | -0.4 |
| Mining | 11,717 | 13,300 | 11,800 | -11.9 | 1.7 |
| Government | 96,625 | 98,100 | 97,300 | -1.5 | 0.0 |
| Wholesale and Retail Trade | 97,608 | 103,700 | 98,800 | -5.9 | 0.5 |
| Unemployment Rate (%) | 6.0 | 6.7 | 4.9 | — | — |
| **Average Weekly Earnings** | | | | | |
| Manufacturing ($ Per Worker) | 450.09 | 437.66 | 475.27 | 2.8 | 3.7 |
| **Industrial Power Sales (000 Kwh)** | 1,231,399 | 1,226,661 | 92,705 | 0.4 | -11.2 |
| Mortgage Loans Closed ($000,000)[b] | NA | NA | NA | — | — |
| **Bank Deposits ($000,000)**[c] | | | | | |
| Demand Deposits | 909 | 924 | 881 | -1.7 | 2.3 |
| Time and Savings Deposits | 1,579 | 2,114 | 1,188 | -25.3 | -1.1 |
| **Air Transportation** | | | | | |
| Passengers Enplaning (Number) | 1,509,872 | 1,475,115 | 121,918 | 2.4 | 3.0 |
| Passengers Deplaning (Number) | 1,515,834 | 1,487,639 | 113,851 | 1.9 | -3.9 |
| Freight Enplaned (Tons) | 6,498 | 7,189 | 690 | -9.6 | 22.1 |
| Freight Deplaned (Tons) | 10,366 | 10,789 | 951 | -3.2 | 2.0 |
| **PERMIT-AUTHORIZED CONSTRUCTION**[a] | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 144,549 | 180,693 | 4,733 | -20.0 | -28.0 |
| Number of Units | 2,281 | 2,985 | 70 | -23.6 | -38.6 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 5,438 | 28,202 | 430 | -80.7 | — |
| Number of Units | 171 | 975 | 21 | -82.5 | — |
| Nonresidential | | | | | |
| Commercial ($000) | 119,340 | 66,204 | 2,490 | 80.3 | -69.0 |
| Industrial ($000) | 3,345 | 5,705 | 0 | -41.4 | — |
| Institutional ($000) | 19,027 | 9,222 | 230 | 106.3 | -79.5 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 48,318 | 48,463 | 70 | -0.3 | -59.1 |
| All Other Nonbuilding ($000) | 4,060 | 3,255 | 41 | 24.7 | -58.8 |
| Total Construction ($000) | 344,076 | 341,744 | 7,993 | 0.7 | -50.6 |
| **General Business Index** | 89.6 | 84.4 | 92.0 | 6.2 | -0.2 |

Note: Wage and salary employment data preliminary.

[a] Includes revisions.

[b] By Savings and Loan Associations.

[c] Deposits of large commercial banks.

NA = Not Available.

Sources for all tables: Local utilities companies; 10th Federal Reserve District Member Banks; Federal Home Loan Bank of Topeka; Oklahoma Employment Security Commission; United States Department of Commerce, Construction Statistics Division; Oklahoma Department of Transportation, *Progressive Report of the Transportation Director;* Center for Economic and Management Research, College of Business Administration, The University of Oklahoma. The data for all tables were compiled by Marjorie E. Earley, Statistician for CEMR and Brian Hickey, Research Assistant.

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# *Business Highlights*

*Neil J. Dikeman, Jr.*

The forecasts of economic activity in Oklahoma presented at this time last year were somewhat optimistic in view of the actual performance of the economy during the year. For example, where retail sales were expected to increase slightly due to a strong performance by the non-durable lines which would off-set a decline in sales of durable goods, non-durable goods sales experienced a very poor year and enforced the decline in durable goods sales. Next, the gains that were expected in manufacturing and construction employment during the latter half of the year did not emerge thus leaving employment marginally below that of the previous year. Last year's forecast of a decline of from 5 to 7 percent from 1986 levels in construction, however, was nearly perfect as was the forecast of deposits in depository institutions throughout the State. Conversely, both the energy output and personal income forecasts were overly optimistic while the forecast of the General Business Index was somewhat pessimistic.

The actual performances of the major economic sectors during 1987 indicate that recovery of the State's economy is still sometime away. The failure of employment to increase and the unexpected sharp drop in retail sales are only two of the problem areas which face the State at this time. There are, however, several indicators which lend some limited optimism to the outlook for 1988.

## Personal Income

Personal income when stated in current dollars rose by 1.7 percent during the year to $41.4 billion which, on the surface, appears to be a rather significant gain. However, the increase failed to match the increase in the rate of inflation for the second successive year thus leaving the value of real personal income nearly 2 percent below that of 1986 and at about the same level as 1983.

The failure of personal income to rise as rapidly as the rate of inflation during 1988 can be attributed to the fact that wages and salaries experienced only a marginal increase which was largely offset by decreases in property and proprietors income. Therefore, the modest gain in personal income was attributable for the most part to an increase in transfer payments.

## Retail Trade During 1987

Retail sales in Oklahoma during December rose by 13.1 percent which, after adjustment for seasonal variations, was 1.7 percent less than seasonally expected for December. This less than seasonal rise coupled with seasonally adjusted declines in sales during six of the eleven previous months of the year resulted in a 10.4 percent decrease during 1987 from the 1986 total which was the sharpest drop in this important indicator in the past twenty years and only the second annual decrease since 1970.

The less than seasonal December increase in total sales over November levels was primarily due to unexpectedly small increases in all non-durable goods lines and in furniture and auto accessory sales among the durable goods lines. The picture might have been worse however, had not the declines in automobile and lumber and building material sales been far less than was expected thereby resulting in seasonally adjusted increases over November.

Sales of all merchandise lines, except drug stores, declined during 1987 with the largest losses occurring in sales of food — off nearly 21 percent; automobile dealerships — down by more than 14 percent; lumber and building material stores — down by more than 11 percent and other durable goods sales which declined nearly 16 percent. Losses experienced by the remaining merchandise lines ranged from less than 1 percent for general merchandise, hardware stores and restaurants to 6.7 percent for furniture dealers with the gain of 7.9 percent in sales of drug stores being the only increase noted during the year. The unusually large decline in sales of food in areas outside the metropolitan districts — according to retailers — was the decline in the size of the market coupled with a growing trend in the purchase of lower priced food products by the consumer.

One question which arises relates to the areas of the State which suffered most from the slump in sales. In this respect, the MSAs fared less badly than did the remainder of the State as is witnessed by the fact that total sales in the five large areas decreased by 4.9 percent during the year. These losses ranged from one of less than 1 percent in Lawton to one of 5.9 percent in Tulsa. Next, the larger cities and towns outside the five metropolitan areas experienced a total decline in sales from 1986 levels of 8.2 percent. The changes in sales during 1987 in this group of communities ranged from an increase of 1.9 percent in Stillwater to a decrease of 28.5 percent in Henryetta. This suggests then that, in order for the State's sales volume to decline by 10.4 percent, sales in the remainder of the State must have decreased radically. Further analyses of the data reveals that, indeed sales of retail establishments located in the urban and rural areas outside the five MSAs and the 31 cities and towns which are reported separately in this publication declined by 34.9 percent in 1987 from the volumes reported in 1986.

### Employment

The average monthly labor force declined by 29 thousand persons during 1987 while average monthly employment was off the 1986 average by 13 thousand jobs. As a result and despite the decline in employment, the average unemployment rate for the year dropped to 7.4 percent to reverse the increase noted in this indicator between 1985 and 1986.

The decline in employment during the year was due to a 9.4 percent drop in agriculture employment which was tempered somewhat by a fractional decrease in nonagricultural jobs. Among the nonagricultural segments, the largest losses occurred in mining employment (down 2.9 percent), manufacturing (down 2.5 percent), retail trade (down 1.6 percent) and contract construction (off by 1.2 percent). Since the mining, manufacturing and construction industries have the highest wage scales among the various sectors, the decreases experienced by them had a very damaging effect on wage and salary incomes. The only increases noted in average monthly employment were one of 1.2 percent in the service trades and one of only 0.1 percent in government.

### Construction Activity in 1987

The dollar volume of construction activity in Oklahoma dropped again in 1987 to mark the fourth successive annual decline in construction activity. However, this most recent annual decrease provided some optimism since it represented the smallest drop of the last four years. Essentially, the 1987 decline was attributable to a 70 percent drop in the construction of multi-family dwellings coupled with decreases of 44.1 percent in industrial building; 19.8 percent in non-building construction; 14.9 percent in institutional building and 9.8 percent in single family dwellings. Fortunately, much of the impact of these losses was off-set by increases of 18 percent and 14.4 percent in commercial building and street and highway construction respectively.

It should be noted that the increase in commercial construction during 1987 reversed the downward pattern of the two previous years while that of street and highway construction was the second successive gain experienced by this type of construction activity. Conversely, the decline in industrial building during the year was the second successive drop and institutional building activity was off the previous year's total for the fifth consecutive year. The housing decreases marked the fourth straight drop in terms of the dollar volume of construction activity.

### Banking and Finance

Deposits in Oklahoma financial institutions declined for the second successive year but the rate of decrease was only 2.4 percent which was considerably less than the 3.8 percent drop suffered in 1986. Unlike 1986, the 1987 decrease was due entirely to a 3.6 percent loss in savings account balances while demand account balances rose by 1.8 percent during the year thereby raising them to near the 1985 level.

Contacts with the depository institutions indicate that a major cause for the decline in savings deposits was the reinvestment of funds in instruments offering higher interest rates. Another, but less important cause for this reduction was the decline in employment throughout the State and its negative impact on wage and salary income.

The condition of thrift institutions presented an even more pessimistic picture in that the assets of these institutions declined by 0.2 percent to mark the first downturn in this indicator in at least twenty years. The decline in these assets was accompanied by a decrease of 35.5 percent in mortgage loans closed which more than reversed the increase noted at the end of 1986.

### Manufacturing

Manufacturing activity during 1987, as measured by manufacturing employment decreased for the second successive year. This decrease reduced the average monthly level of manufacturing employment in the State by more than 4 thousand jobs or 2.5 percent which was the slowest rate of decline in the past six years. Further evidence of the slowdown in manufacturing activity is the fact that the average number of hours worked each week during 1987 dropped by 0.3 percent to 41.2 hours — a reversal of the increase noted during 1986.

### Energy

The energy sector of the State's economy continued to present a very pessimistic picture during 1987 as crude oil production dropped to slightly more than 132 million barrels — the lowest output since well before 1950. It is somewhat surprising to note that this decline in crude oil production occurred during a period in which the average price rose from $14.05 per barrel in 1986 to $17.72 per barrel in 1987 when it was expected that a price increase of this magnitude would at least hold production at the 1986 level.

Natural and casinghead gas

production during 1987 experienced a slight increase of 3.3 percent to a total of more than 1.99 trillion cubic feet which represented a reversal from the decrease noted in 1986. This increase in output came at a time when the average price of gas declined about 26 cents per thousand cubic feet to bring the average monthly price well below the 1980 level. The increase was attributable to the relatively harsh weather experienced by the State during the latter portions of the fourth quarter of the year.

### Oklahoma General Business Index

Despite the relatively poor showing by the major indicators discussed earlier in this article, other factors such as the decline in the number of bankruptcies and the apparent optimism on the part of business leaders who have survived the problems of the past four years, the General Business Index for the State rose to 94.1 during the year. This increase of 3.3 percent raised the Index to its highest level since 1984.

## The Outlook

The disappointing decreases which occurred during 1987, when some evidence of recovery was expected, creates some hesitancy in estimating the changes which will occur in Oklahoma's economic conditions during 1988. Already three banks have closed during the early part of the year and more are expected to close as the year progresses. On the other hand, several national firms have announced their intentions to open new facilities in the State which will provide job opportunities for several thousand persons. This suggests that the economy will present a mixed picture during the early part of the year at least but could exhibit some strength during the latter two quarters.

### Retail Trade

The Conference Board reports that consumer confidence in the economy throughout the nation is slowly regaining the loss in confidence of the economy experienced by consumers following the sharp October downturn in the World's stock markets. This renewed confidence has resulted in increases in plans to buy such big-ticket items as appliances, automobiles and homes within the next six months which suggests that decreases in sales of durable goods noted during the latter half of 1987 should be reversed during the first half of 1988. Moreover, the Conference Board found that, even though the confidence of consumers in the West South Central States (which includes Oklahoma) was the lowest of any region in the country, it too, had experienced some improvement to the extent that an increased number of consumers in this area expected to increase their discretionary purchases. If this optimism holds or increases, Oklahoma retailers of big ticket items such as automobiles, appliances, and home furnishings can expect significant increases in sales during at least the first half of 1988 which is expected to reverse the 1987 downturn in sales of durable goods and result in sales gains of up to 5 percent in this merchandise group.

The sales of non-durable goods lines, conversely, are problematical and depend in large degree to the changes which occur in the population and income of the State. It appears now that the outmigration of Oklahomans to other areas which has occurred since 1984 has nearly run its course and that the number of residents will begin to edge up during 1988. In the event that the State does begin to experience a meaningful reversal of the outmigration trend, food, restaurant, apparel, service station and general merchandise sales can be expected to stabilize and even turn upward and sales of drug stores should continue the upward pattern of the past several years. This would mean that total sales of nondurable goods would at least remain unchanged and could show an increase of about two to four percent. Combining this potential change with that of durable goods sales would result in an increase in retail sales during 1988 of between 2.5 and 4.5 percent over the 1987 total.

### Employment

Non-agriculture employment, which declined slightly in 1987 after remaining relatively stable during 1986, should experience a modest increase in 1988. This increase is expected to come about through slight gains in retail and wholesale trade, services and construction with little or no changes occurring in manufacturing, mining and government. Agriculture employment, on the other hand, is problematical in view of the sharp drop which was noted in 1987. If a similar decline in employment occurs in this sector of the economy, it could cause total employment to be down slightly. However, if the number of jobs in agriculture remain stable or at least declines only slightly, total employment could increase by as much as 2 percent thus bringing average monthly total employment for the year to 1,470,000 jobs which will be slightly higher than in 1986. If agriculture employment experiences a decline of as much as 9 percent, as was the case in 1987, total employment could experience a decline of approximately 1 percent in the average monthly employment level.

### Construction Activity

As noted earlier, it appears that the lags noted in construction activity during the past four years may be nearing an end although some elements may continue to drop during 1988. First, recent announcement of new plants and plant expansions should at least halt the drop in industrial building activity and, if the plant additions and expansions occur, might even raise the volume from 10 percent to 15 percent. In a like manner, street and highway building expenditures can be expected to increase significantly in light of the new construction planned in the Oklahoma City area and the expenditures which will be required to repair the damages to streets and highways caused by the winter's ice and snow storms. The best estimates at this time are for street and highway construction expenditures during 1988 to show an increase of from 10 to 15 percent over the 1987 level. Commercial construction will probably not show any increase during 1988 unless residential building picks up rapidly which is not expected to happen within the next twelve months. This coupled with the continuing high vacancy rates in office buildings suggests that commercial construction could decline by as much as 15 percent from last year's total.

Institutional building activity is expected to consist primarily of additions to existing structures and completion of buildings now underway which will mean that any change that occurs in this construction element will probably be downward and could be as much as a 10 percent drop from the very low 1987 total.

Housing construction — particularly in single family dwellings — offers some hope of increase. This optimism stems from two factors the first of which is the Conference Board's estimate that about 5 percent of the household population plans to purchase housing within the next six months. However, at least 40 percent of those planning to purchase homes are expecting to buy used or older housing while 30 percent will seek new housing. The remaining 30 percent are uncertain as to the age of the housing they will buy and will probably shop for housing based on price and their abilities to pay. These data indicate that the bulk of the demand for housing will be for used housing which in itself will help the building industry by reducing the surplus housing now on the market thereby increasing the incentives to build replacement dwellings. The second factor which lends optimism to the near future of residential construction is the possibility of meaningful increases in population that will need housing. Any increases of this sort will not only further reduce surpluses of single family dwellings but will also cut the relatively high apartment vacancy rates. The feeling now is that construction of single family dwellings during 1988 will increase between 3 and 4 percent but that little or no change will be noted in the construction of multi-family dwellings.

The above forecasts suggest that construction activity has every opportunity of reversing the downward pattern of recent years and could show a gain of as much as 5 percent by year's end. However, this increase, if it occurs, will depend heavily on projected increases in street and highway, industrial, and single family dwelling construction.

### Banking and Finance

The fact that deposits in all depository institutions in the State followed the 3.8 percent drop of 1986 with one of 2.4 percent in 1987 indicates that the rate of outflow of these deposits to other types of relatively liquid investments is beginning to abate. However, since the rates of interest paid by regulated depositories remains well below that paid by such other monetary functions as mutual funds, and other investments, it is not likely that the deposit outflows from regulated depositories will cease in the near future. This suggests that, during 1988, deposits in all regulated depositories in the State will continue the downward pattern of the past two years and will be between 1 and 2 percent below the 1987 total.

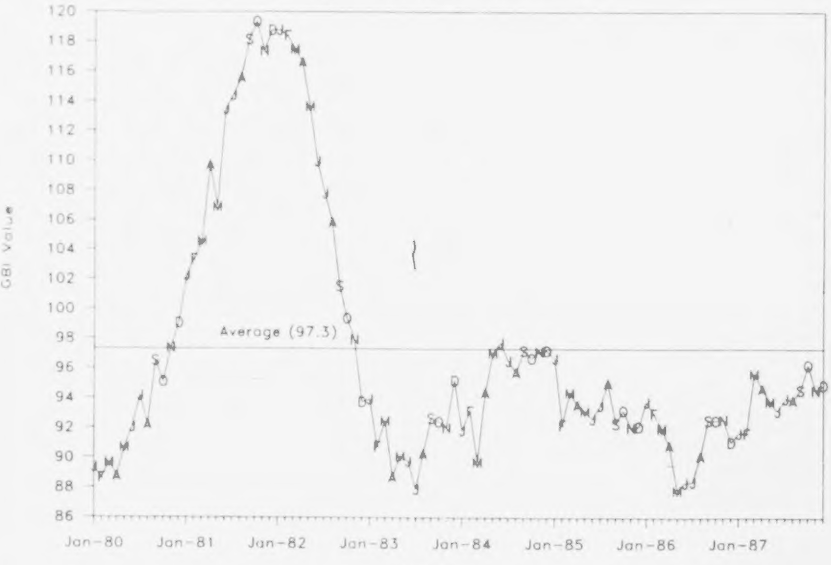
### Energy

The outlook for energy in 1988 presents a mixed picture in that the output of natural and casinghead gas is expected to continue the upward movement of 1987 by rising between 1 and 2 percent with prices remaining at or slightly above the present price of $1.45 per thousand cubic feet. Conversely, crude oil production will continue to decline, although not as rapidly as has been the case during the past two years. Currently, it appears that crude oil output—assuming that only minimal or no changes in the average price of oil will occur — will fall by between 3 and 4 percent thus bringing the total to between 126 and 128 million barrels.

### Personal Income

The mixed outlook for the various economic sectors suggests that personal income in terms of current dollars will show a modest increase of about 3 percent during 1988 to bring the total for the year to between $42

Oklahoma State General Business Index
January 1980 through December 1987



and $43 billion. However, at its current rate of increase, it appears that the rate of inflation will exceed that of personal income by about 2 percent which will mean that the purchasing power provided by personal income will be about 1 percent below that of 1987.

**Oklahoma General Business Index**

The trend in this index prior to 1987 has been downward but this pattern appears to have been reversed in 1987 by the 3.3 percent increase noted during that year. Given the relative improvements projected for various sectors of the economy in 1988 which declined in 1987, the General Business Index should rise by about 4 percent to an average of about 98 percent.

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# *A Primer on What's Wrong with U.S. Saving and Investment 1980-86*

*Larkin Warner*

Recent instability in financial markets has riveted the business community's attention to macroeconomic performance and to public policy affecting the macroeconomy. Discussion often focuses on the "twin deficits" in the federal budget and the balance of international trade.

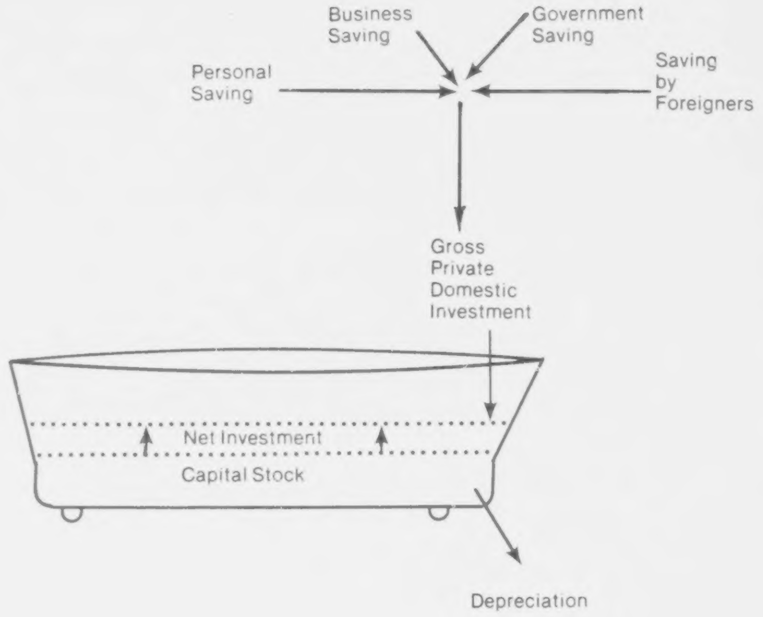
How are the twin deficits linked, and how serious are the macroeconomic problems which they generate? How are all these problems bound together in the structure of saving and investment?

One of the best ways to understand the new macroeconomic environment is to focus on two simple accounting identities: (1) at the end of any year, a nation's *gross investment* equals its *sources of saving* and (2) gross investment minus depreciation equals *net investment* which is, by definition, the annual addition to a nation's accumulated stock of capital.

The "Bathtub Theorem" (see Figure 1) helps visualize how these accounting identities work out.[1] Because concepts from the U.S. national income accounts are being used, it is important to define the terms "saving," "investment," and "capital stock" in order to understand how the macroeconomic bathtub works.

**FIGURE 1**

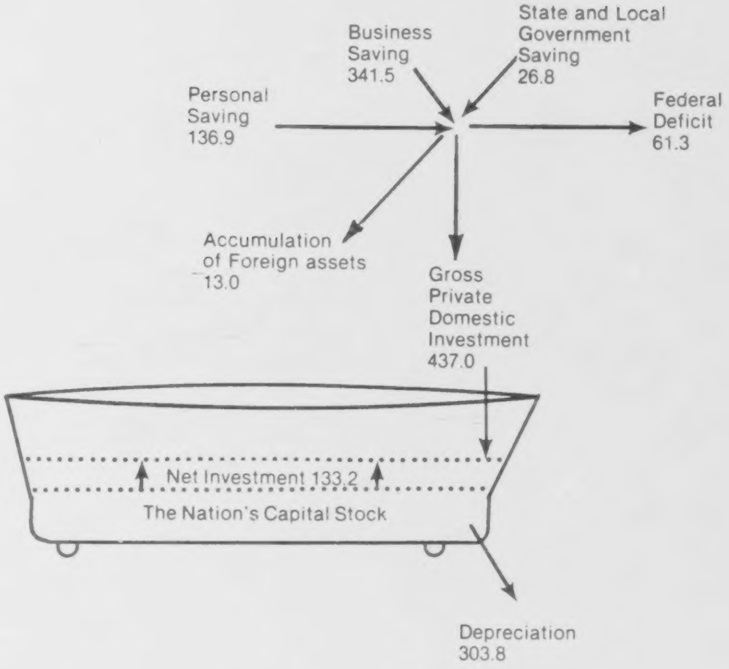
**The Bathtub Theorem**



- Saving occurs whenever any sector of the economy spends less on the flow of current production (Gross National Production or GNP) than it could finance with current income; saving can be positive or negative (dissaving).
- Personal saving is performed by the household sector; business saving is essentially retained earnings; government saving (both federal and state/local) is the difference between tax and other revenue receipts and outlays; and, on a net basis saving may flow out of the U.S. as we acquire assets abroad, or foreign saving may flow into the U.S.

FIGURE 2

The 1980 Model
(amounts in billions of dollars)


State and Local Government Saving 26.8
Business Saving 341.5
Personal Saving 136.9
Federal Deficit 61.3
Accumulation of Foreign assets 13.0
Gross Private Domestic Investment 437.0
Net Investment 133.2
The Nation's Capital Stock
Depreciation 303.8

Reference: GNP = $2,732.00

(Statistical discrepancy: 6.1)

- Investment refers to the purchase by business of currently produced plant, equipment, and inventory. Investment may be gross (Gross Private Domestic Investment) or net after depreciation.
- Capital (the capital stock) is the total accumulation of all plant, equipment, and inventory that has ever been produced in the past less depreciation. When capital is accumulated as a result of investment, the nation's productive capacity is enhanced. This enhanced productivity provides rewards to savers in the form of interest, profit, and rents. In the U.S., on average, three dollars worth of capital stock generates an output flow of one dollar per year.

The operation of the bathtub is now fairly obvious. The sum of the flows of saving (i.e. not using current production) are identical to gross investment. When gross investment (the inflow) exceeds depreciation (flowing out the drain) net investment is positive and the capital stock (water in the tub) rises. Since World War II, U.S. net investment has always been positive.

Now that this part of the nation's macroeconomic plumbing system has been mastered, the dramatic changes in the structure of our economy which have occurred since 1980 are now understandable. This is demonstrated in Figures 2 and 3 with more bathtubs—a 1980 model and a 1986 model. (A 1987 model would look very much like the 1986 model, though the federal deficit flow will be somewhat smaller.)

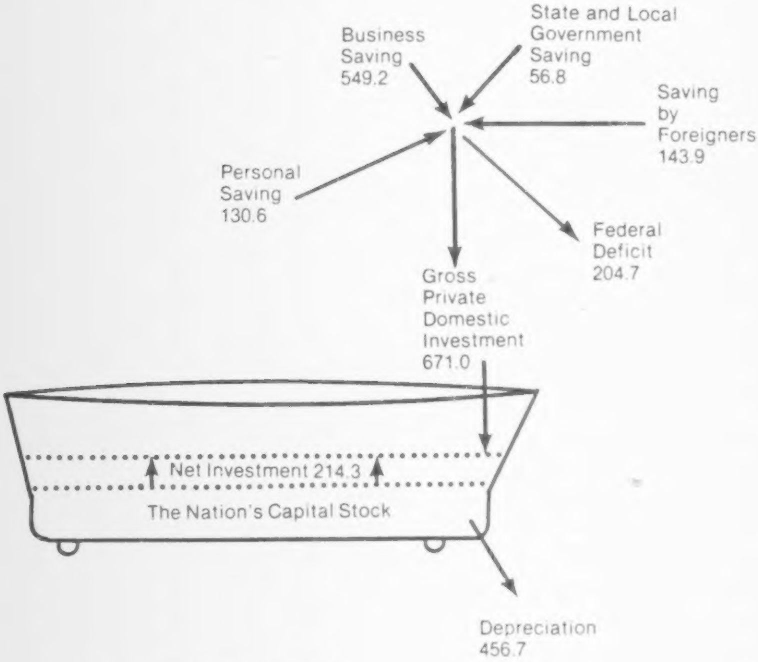
The main part of the tub and its contents look about the same in each of the years when viewed relative to the flow of total output (GNP). In both years, gross investment was about 16 percent, and net investment about 5 percent of GNP. These percentages hold for the entire period 1980-1986, except for a drop in the investment share in 1982 due to a recession.[2] Politicians love to tout the performance of the U.S. macroeconomy during the 1980s—12 million new jobs since 1982, the longest sustained expansion in modern history, and so forth. Most of these assertions are true and are due almost entirely to the fact that economic growth has been sustained by a steady flow of gross and net investment, and thus by a steady expansion of the nation's productive capacity.

The big difference between the 1980 and 1986 models is found in the saving pipes.

- Although GNP grew 55 percent between 1980 and 1986, personal saving by households actually *fell* 4.6 percent! The Yuppies are not saving like their parents.
- Business saving (retained earnings) held up quite well, as has the saving behavior of state and local governments while they fund giant employee retirement programs.
- Dissaving by the federal government skyrocketed from $61.3 billion in 1980 to $204.7 billion in 1986. A program of major tax cuts put in place in 1981 was not matched by expenditure cuts.
- The only way the U.S. maintained its level of investment spending and its prosperity was by shifting in a big way to reliance on the saving of foreigners. In 1980, the U.S. was actually a net supplier of saving abroad; by 1986, we were relying on other nations to provide $143.9 billion of saving—about one-fifth of our gross investment.
- The dollars that other nations need in order to translate their saving into U.S. assets come from a variety of sources including the trade deficit,

FIGURE 3

The 1986 Model
(amounts in billions of dollars)


Business Saving 549.2
State and Local Government Saving 56.8
Saving by Foreigners 143.9
Personal Saving 130.6
Federal Deficit 204.7
Gross Private Domestic Investment 671.0
Net Investment 214.3
The Nation's Capital Stock
Depreciation 456.7

Reference: GNP = $4,235.0

(Statistical discrepancy: 4.8)

Eurodollars, and central bank intervention in exchange markets. The rapid growth in the trade deficit after 1980 was an important source of dollars used by foreigners to accumulate U.S. assets.

- Note that while a falling dollar in international exchange will stimulate U.S. exports and choke off imports, it may also choke off the flow of foreign saving to the U.S. and therefore reduce U.S. investment spending.[3]
- The big federal deficit has driven real interest rates higher in the United States. This has stimulated foreigners to buy T-bills and other U.S. securities, and thus to help finance both the federal deficit and the trade deficit.

Hopefully, it is now clear that, given the reduced saving by U.S. households and the massive federal deficits, the U.S. could not have maintained investment without the inflow of saving from abroad, i.e., without the willingness of persons and firms outside the U.S. to accumulate real and financial assets within our boundaries. Domestic spending beyond the level of domestic production during the 1980s was financed by foreign saving.

So what is wrong with saving and investment in the United States? Investment has held up well; there is nothing fundamentally wrong with the level of investment. Gross investment has been a steady 16 percent of GNP. Of course, the nation's productivity record could be improved if the share of GNP allocated to plant and equipment were expanded. But 16 percent is not bad. Rather, the problem lies with saving.

Remember that savers must be rewarded for their thrift, and the rewards come from the increased production generated by an ever-expanding capital stock. These rewards—interest, profit, rents—raise the standard of living of people in the U.S. when the saving originates in the U.S. However, the rewards accrue to persons in other nations if *they* are the ones who do the saving. Thus the shift to foreign sources of saving requires a diminution in the future standard of living in the U.S. It would obviously be preferable to fund an adequate level of investment spending with domestic saving; this cannot be done because of the large federal deficit and the current consumption binge of the American household.

Diminution of future U.S. standards of living is not the only result of the 1986 model bathtub. In order to keep the flow of foreign saving arriving on a regular basis, there is a tendency for upward pressure to be placed on interest rates. The depreciation of the dollar enhances that pressure. We all know what higher interest rates can mean for the stock market—to say nothing of the willingness of businesses to undertake new investment projects.

Clearly, the 1980 macroeconomic tub is more consistent with the long term national interest. What can be done to rearrange the flows in the later model tubs? The fundamental answer is simple: cut the federal deficit and stimulate household saving. Federal outlays must be reduced and/or taxes increased. Measures need to be taken to make saving more attractive. Cutting the federal deficit is a political feat that is easier said than done. The 1987 deficit will be smaller than 1986, but will still be large by historical standards. Feasible policies for enhancing household saving are hard to develop. There are now indications that financial market instability will goad the policymakers to take more effective action.

Unfortunately, there is another option for repairing the late model tubs: a recession. A major downturn in U.S. investment spending would, of course, reduce the need to rely on foreign saving.[4]

Either a recession or a retrenchment of the federal budget is likely to make many Americans think they are worse off. And quite a few will be correct. Moreover, neither outcome is likely to enhance the popularity of politicians in power at the time. Austerity has never been an effective political platform in the United States. *But austerity will come—one way or another.*

## Notes

[1] Kenneth Boulding deserves the credit (or blame) for the ''bathtub theorem''. See his *Principles of Economic Policy* (Englewood Cliffs: Prentice-Hall Inc., 1958), pp. 65-67.

[2] Data are from the national income accounts published in the *Survey of Current Business*, July, 1987, and the 1987 *Economic Report of the President*.

[3] See, for example, Federal Reserve Bank of San Francisco, *FRBSF Weekly Letter*, March 27, 1987.

[4] This same point is made in a recent feature article in the *Wall Street Journal*. See ''Surprising Majority Agrees on Need for Weaker Dollar,'' Nov. 5, 1987, p. 18.

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# *An Analysis of Senate Bill 434 As a Proposal to Alter the Oklahoma Tax Code*

*Scott Turner*

## Introduction

The 1986 Federal Tax Reform Act will generate a very large automatic increase in tax revenue to Oklahoma from the Oklahoma individual income tax. The tax increase is a consequence of the Oklahoma individual income tax code being coupled to the federal income tax code. Senator Branstetter has introduced Senate Bill 434 to rebate a portion of the unexpected tax revenue to Oklahoma taxpayers. This Senate Bill is co-authored by Senators Branch, Choate, Ford, Pierce and Hooper. Representatives Ken Harris, McMillen and Jim Morgan are authors of the Bill in the House.

It is the specific objective of this article to analyze Senate Bill 434 since it is consistent with the 1971 guidelines of the Oklahoma Income Tax Code and it is similar to rebating bills passed by several other states. The broader objective is to develop a methodology that can be applied to other rebating proposals as well as Senate Bill 434.

The methodology developed in this study addresses the question of how a tax rebate is actually distributed between tax returns. For example, the announcement that Senate Bill 434 would rebate $115 million to Oklahoma taxpayers to partially compensate for the automatic tax increase generated by the 1986 Federal Tax Reform Act is not truly informative unless it is known which tax returns will benefit from the rebate. The worst case scenario would be one where the $115 million rebate only reduces the tax liability of tax returns that did not have an automatic tax increase. The best case scenario is a situation where all of the rebate goes to tax returns with an automatic tax increase with no tax return receiving a rebate in excess of the automatic increase.

## Automatic Tax Increase Generated by the 1986 Federal Tax Reform Act

Oklahoma Adjusted Gross Income is taken directly from federal Adjusted Gross Income (AGI) and with minor modifications becomes Oklahoma AGI. Itemized deductions in the Oklahoma code are identical to federal itemized deductions. Consequently, increases in federal AGI and decreases in federal itemized deductions produce automatic changes to these items on Oklahoma tax returns.

Changes in the federal tax code included in the 1986 Federal Tax Reform Act that are *not* automatically coupled to the Oklahoma code are increased personal exemptions, increased standard deductions and decreased marginal tax rates. The federal code changes that are *not* automatic in the state code are large enough to completely offset the changes that increase federal tax liability for the majority of federal tax returns. However, at the state level individual income tax liability will increase for most Oklahoma tax returns since all of the automatic changes increase tax liability.

Consequently, the net effect of the 1986 Federal Tax Reform Act is to decrease federal individual income tax liability and to increase Oklahoma individual income tax liability.[1] One study reports that the Oklahoma tax increase is approximately 50 percent as large as the federal tax decrease.[2] These figures are estimates for the time when the features of the 1986 Federal Tax Reform Act are fully phased in.

There are many other states (in addition to Oklahoma) that have their state individual income tax code coupled to the federal code.[3] These states will all have an automatic increase in their tax revenue. The amount of the automatic increase will vary between states since the state codes are not identical. Many states with automatic tax increases have implemented tax policy alternatives that are very similar to Senate Bill 434 to rebate some (or all) of the automatic increase.

## The "Efficiency" of a Rebating Procedure

It is not difficult to identify state income tax policy alternatives that would rebate some (or all) of the aggregate automatic increase generated by the 1986 Federal Tax Reform Act to the state taxpayers. However, it is difficult (if not impossible) for a rebating procedure to have an efficiency rating of 100 percent, i.e. a procedure that rebates no more than the amount of the automatic increase for any given tax return. Typically there is over compensation for one group of tax returns and under compensation for another group. The efficiency rating of a rebating alternative simply measures the ratio of the rebate that is allocated to the correct tax returns (in the correct amounts) to the total amount of the rebate. For example, a rebating proposal with a revenue cost of $50,000,000 and an efficiency rating of 80 percent implies that $40,000,000 is "On-Target" and $10,000,000 is "Off-Target" with respect to the original objective of the proposal. While a rebating proposal with a high efficiency rating should compete with other alternatives (e.g. roads, education, health, etc.) for limited state revenue, a rebating proposal with a low efficiency rating should be rejected regardless of its revenue cost.

Oklahoma is a state where it is impossible to implement a "perfect" rebating procedure since the detailed items that changed on the federal tax form, e.g. IRAs, the two earner adjustment, capital gains, consumer interest, etc. do not appear separately on the state form, but are aggregated into AGI and itemized deductions. Consequently, for Oklahoma any rebating procedure will reduce tax liability of some tax returns by more than the amount of the automatic tax increase.

It is the objective of this study to develop a methodology for analyzing Senate Bill 434 as a tax policy alternative to rebate some of the automatic increase for Oklahoma. The methodology estimates the efficiency rating of this bill and could also be applied to other rebating proposals when they are introduced.

## Methodology to Analyze Individual Income Tax Rebating Proposals

The effectiveness of a rebating proposal for the Oklahoma individual income tax code could be measured at the tax return level in the following manner. If the proposal decreases tax liability for a given Oklahoma tax return to a level that is still greater than the pre-tax reform tax liability, then the proposal is completely "On-Target" for that tax return. For example, suppose that pre-tax reform tax liability is $500, post-tax reform liability is $750, and tax liability calculated using the proposal is $600 for a given tax return. In this case the cost of the proposal for this return is $750 - $600 = $150. All of $150 is being used for its intended objective to offset part of the increased tax liability generated by federal tax reform. However, consider the situation for a given tax return where tax liability using the proposal is less than pre-tax reform liability. In this situation the proposal reduces tax liability by more than tax reform increased tax liability. For example, suppose for a given tax return that pre-tax reform tax liability is $500, post-tax reform tax liability is $600 and liability using the proposal is $350. In this example the reduction generated by the proposal from $600 to $350 must be divided into two parts. The difference between post-tax reform liability and pre-tax reform liability represents a tax reduction "On-Target" with respect to its intended objective. However, the difference between pre-tax reform liability and liability using the proposal represents a tax reduction that is "Off-Target" from its intended objective. In the example $600 - $500 = $100 is "On-Target" whereas $500 - $350 = $150 is "Off-Target."

The over-all effectiveness of a rebating proposal could be measured using microsimulation. The policy proposal could be simulated on a sample of representative Oklahoma tax returns. Each record in the sample has a weight such that the sum of the sample weights is approximately equal to the number of Oklahoma tax returns. For this set of returns the following calculations are made for each return and the results are then aggregated for all returns in the sample to calculate the effectiveness rating of the proposal.

B = pre-tax reform tax liability (1985 tax year)

A = post-tax reform tax liability (Tax Reform Act fully phased in)

P = tax liability using the tax policy proposal. (e.g. for Senate Bill 434 Oklahoma the personal exemption would be set equal to $2,000, an extra $1,000 exemption would be included for persons over 64 and all features of the 1986 Federal Tax Reform Act would be included in the calculation of federal tax liability).

(It is expected that $A >= B$ and $P <= A$).

if $P >= B$ then On-Target = $A - P$.

if $P < B$ then On-Target = $A - B$ and Off-Target = $B - P$.

Revenue Cost = (On-Target + Off-Target)

The ratio of On-Target to (On-Target + Off-Target) aggregated for all returns in the sample is a measure of the efficiency of the rebating proposal.

## Analysis of Senate Bill 434

Senator Branstetter introduced Senate Bill 434 to rebate part of the automatic increase in Oklahoma tax liability generated by the 1986 Federal Tax Reform Act. This proposal would increase the amount of the state's personal exemption from $1,000 to $1,300 in 1988, to $1,600 for 1989 and to $2,000 (the federal personal exemption amount) beyond 1989. The proposal would allow an extra $1,000 exemption for persons over 64 years of age beginning in 1988. However, the new federal tax code does not include an extra exemption for persons over 64 years of age.

Senator Branstetter's proposal is consistent with the implied guidelines of the Oklahoma individual income tax code in that the Oklahoma code was originally designed for Oklahoma taxable income to be approximately the same as federal taxable income.[4] The dissimilarity between the two codes was to be primarily in the marginal rate structure. The dollar value of personal exemptions in the state code was not made an automatic feature but over the years the Legislature has modified this item as this item was modified on the federal tax form. For example, the Oklahoma personal exemption was increased from $750 to $1,000 in 1979 following a similar change in the federal code. The Oklahoma standard deduction was originally in conformity with the federal amount but has not been altered as the federal amount was altered. In fact, at the present time the new change in the federal standard deduction has created a very large difference between the state and the federal amount.

Senate Bill 434 will not be considered in the 1988 legislative session since it is well known that this proposal would rebate a large amount of the additional revenue from the change in the federal tax code. Without the additional revenue from federal tax reform it is likely that the state would be facing another revenue shortfall in fiscal 1989. Consequently, Senate Bill 434 will not be evaluated by the Legislature on its "effectiveness" to rebate a portion of the automatic tax increase produced by the 1986 Federal Tax Reform Act.

However, Senate Bill 434 will be analyzed in this study since it is a very logical first step in adjusting the Oklahoma tax code to once again be in conformity with the federal code. This bill is a very logical first step if there is ever any serious discussion of rebating a portion of the automatic tax increase from the 1986 Federal Tax Reform Act. Also, several states have implemented rebating procedures that are similar to Senate Bill 434.

The relationships defined in the Methodology section were applied to a sample of representative Oklahoma tax returns using the 1990 provisions of Senate Bill 434, i.e. personal exemptions = $2,000 and an extra $1,000 exemption for persons over 64 years of age.[5] The tax returns used for the policy microsimulation were generated from Oklahoma households in the March 1985 Current Population Survey (CPS). Microsimulation is not precise but it is useful for policy analysis.[6] The results obtained are given in Table 1. This table is dissaggregated for tax returns that were unaffected by the Tax Reform Act (i.e. A = B) and returns that have increased tax liability as a consequence of the Tax Reform Act (i.e. A > B). The columns in the table are for "On-Target" and "Off-Target."

In Table 1 it is observed that the tax reduction generated by Senate Bill 434 is estimated to be approximately $138,000,000 per year beginning in 1990. Approximately $104,000,000 or 75 percent of the tax reduction is "On-Target." Consequently, the efficiency rating for Senate Bill 434 is estimated to be 75 percent.

The revenue cost of Senate Bill 434 in 1988 with the personal exemption equal to $1,300 would be approximately $48,000,000 with $44,000,000 "On-Target" and an efficiency rating of approximately 92 percent. The revenue cost of this bill in 1989 with the personal exemption equal to $1,600 would be approximately $87,000,000 with $73,000,000 "On-Target" and an efficiency rating of approximately 84 percent.

The aggregate figures presented in this section differ from the aggregate figures generated by the Oklahoma Tax Commission by approximately 15 percent. The Tax Commission estimates generated from their large (confidential) data base would be expected to be more accurate than the aggregate figures generated in this study using a much smaller (public) data base. However, the inherent distributions are approximately the same in both data files. Consequently, ratio estimates such as the rebating efficiency ratio developed in this study should be approximately the same using either data file.

There is a very definite inverse relationship between rebating efficiency and the amount of the personal exemption. Average rebating efficiency is 92 percent with a personal exemption of $1,300, 84 percent with a personal exemption of $1,600 and 75 percent with a personal exemption of $2,000. However, it is interesting to note that the marginal efficiency of the rebate decreases to only 60 percent when the personal exemption is increased from $1,600 to $2,000. That is, only 60 percent of the additional $51,000,000 revenue cost of increasing the personal exemption from $1,600 to $2,000 would actually be used to offset automatic tax increases produced by the 1986 Federal Tax Reform Act.

## Summary and Conclusions

The objective of this article was to analyze Senate Bill 434 as a proposal to rebate a portion of the large automatic tax increase produced by the 1986 Federal Tax Reform Act. The results of this study indicate that the efficiency of this proposal for rebating a portion of the automatic tax increase is only approximately 75 percent.

It was demonstrated in this study that the aggregate amount of a rebate might be misleading, i.e. a large proportion of the rebate might go to the wrong tax returns. Consequently, a methodology was developed to measure how a rebate is actually distributed at the tax return level. This methodology should be useful

**TABLE 1**

**Senate Bill 434's Tax Reduction[a]**
**(millions of dollars)**

| Tax Returns | On-Target | Off-Target | Total |
|---|---|---|---|
| A = B | — | $2 | $2 |
| A > B | $104 | $32 | $136 |
| Total | $104 | $34 | $138 |

[a] Data Base – Oklahoma Households in the March 1985 Current Population Survey.
Note: Personal exemption = $2,000 and an extra $1,000 exemption for persons over 64.

for evaluating any rebating proposal.

Senate Bill 434 was selected for analysis since it is a logical first step in identifying a rebating proposal if rebating becomes a serious issue in the Oklahoma Legislature. It certainly meets the implied guidelines of the Oklahoma individual income tax code originally specified in 1971. It is also similar to rebating proposals implemented by several other states.

A very definite inverse relationship was observed in this study between efficiency and the amount of the personal exemption. For example, the efficiency of Senate Bill 434 for 1988 using a personal exemption of $1,300 was estimated to be 92 percent with a total rebate of $48,000,000. The efficiency of this bill using a $2,000 personal exemption for 1990 (and beyond) falls to approximately 75 percent with a total rebate of $138,000,000.

## Notes

[1] Advisory Commission on Intergovernmental Relations, "Preliminary Estimates of the Effect of the 1986 Federal Tax Reform Act on State Personal Income Tax Liabilities," ACIR (Washington D.C., December 1986).

[2] Scott Turner, "A Microanalytic Simulation of Federal Tax Reform on Oklahoma Tax Filing Units," *The Oklahoma Business Bulletin* (March 1987).

[3] See Advisory Commission on Intergovernmental Relations, ACIR, op. cit.

[4] Ansel Sharp, Scott Turner, and William Stringer, "Revenue and Incidence Effects of the 1971 Oklahoma Tax Code," *The Oklahoma Business Bulletin* (1972).

[5] See Scott Turner, "A Microanalytic Simulation of Federal Tax Reform on Oklahoma Tax Filing Units," op.cit.

[6] Robert H. Haveman, and Keven Hollenbeck, *Microeconomic Simulation Models for Public Policy Analysis* (New York: Academic Press, Inc., 1980).

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# OKLAHOMA BUSINESS BULLETIN

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## SUMMARY OF INDICATORS

| Category | Jan. '88 | Jan. '87 | Dec. '87 | Percentage Change Jan. '88/'87 | Percentage Change Jan./Dec. '88/'87 |
|---|---|---|---|---|---|
| **Personal Income (Monthly Average)** | | | | | |
| Unadjusted ($000,000) | 3,572 | 3,352 | 3,561 | 6.6 | 0.3 |
| Adjusted for CPI ($000,000) | 3,120 | 3,047 | 3,118 | 2.4 | 0.0 |
| **Crude Oil Production (000 bbl)**[a] | 134,035 | 143,075 | 10,521 | -6.3 | -1.7 |
| **Industrial Power Sales (000,000 Kwh)**[b] | 689 | 634 | 685 | 8.7 | 0.6 |
| **Total Bank Deposits (Monthly Average) ($000,000)**[c] | | | | | |
| Demand | 7,694 | 7,539 | 7,569 | 2.0 | 1.6 |
| Savings | 24,625 | 26,396 | 24,567 | -6.7 | 0.2 |
| **Savings and Loan Associations ($000,000)** | | | | | |
| Assets | 10,194.9 | 10,337.6 | 10,130 | -1.4 | 0.6 |
| Mortgage Loans Closed | 36.4 | 91.3 | 52.4 | -60.0 | -30.5 |
| **Employment**[d] | | | | | |
| Total Labor Force (000) | 1,527.4 | 1,563.1 | 1,546.5 | -2.3 | -1.2 |
| Total Employment (000) | 1,411.9 | 1,428.6 | 1,453.6 | -1.2 | -2.9 |
| Unemployment Rate (%) | 7.6 | 8.6 | 6.0 | — | — |
| **General Business Index** | NA | NA | NA | NA | NA |

Note: Includes revisions. In January 1988 the base year for the consumer price index was changed from 1967 = 100 to 1982-1984 = 100. Copies of the monthly revisions are available through C.E.M.R.

[a] 12 months and December '87 data.

[b] Sales of larger privately owned utility companies.

[c] Total deposits of all depository institutions.

[d] Civilian Labor Force.

## RETAIL TRADE IN SELECTED CITIES
($000)

| City | Jan. '88 Adjusted | Jan. '88 Unadjusted | Adjusted '88/'87 Jan. | Adjusted '88/'87 Jan./Dec. |
|---|---|---|---|---|
| Ada | 13,223 | 12,576 | -1.4 | 2.2 |
| Altus | 12,920 | 11,836 | 3.9 | 14.5 |
| Alva | 3,819 | 3,526 | 4.5 | 16.7 |
| Anadarko | 4,958 | 4,430 | 6.9 | 2.3 |
| Ardmore | 19,871 | 17,834 | 9.5 | 4.9 |
| Bartlesville | 19,863 | 17,552 | 6.4 | 13.7 |
| Blackwell | 3,640 | 3,208 | 27.0 | 26.5 |
| Broken Arrow | 19,895 | 17,467 | 10.9 | 10.0 |
| Chickasha | 9,358 | 8,524 | 7.5 | 10.5 |
| Clinton | 6,806 | 6,217 | 12.0 | 19.7 |
| Cushing | 5,316 | 4,741 | 4.3 | 1.3 |
| Del City | 11,094 | 10,111 | 10.7 | 6.7 |
| Duncan | 13,960 | 12,964 | 14.2 | 4.5 |
| Durant | 11,512 | 10,382 | 17.3 | 17.6 |
| Edmond | 25,353 | 23,016 | 11.9 | 45.1 |
| Elk City | 7,607 | 7,132 | 9.9 | 11.1 |
| El Reno | 7,740 | 7,101 | 5.1 | 15.1 |
| Guthrie | 5,051 | 4,550 | 2.4 | 7.9 |
| Guymon | 4,676 | 4,204 | 5.9 | 30.4 |
| Henryetta | 2,981 | 2,754 | -31.9 | 5.4 |
| Hobart | 2,334 | 2,174 | -0.7 | 14.6 |
| Holdenville | 2,693 | 2,493 | 2.9 | 10.6 |
| Hugo | 3,205 | 2,870 | 21.6 | 21.1 |
| Idabel | 3,553 | 3,312 | -5.2 | 4.1 |
| Lawton | 48,432 | 42,737 | 3.9 | 0.5 |
| McAlester | 11,429 | 10,016 | 19.9 | 23.3 |
| Miami | 12,049 | 11,180 | 12.5 | 22.2 |
| Midwest City | 34,724 | 33,709 | 15.7 | 2.7 |
| Moore | 14,563 | 13,019 | 11.5 | 5.3 |
| Muskogee | 29,855 | 26,088 | 8.4 | 8.2 |
| Norman | 63,154 | 59,024 | 12.8 | 16.6 |
| Oklahoma City | 274,153 | 243,966 | 6.3 | 0.6 |
| Okmulgee | 5,390 | 4,756 | 2.7 | 17.0 |
| Pauls Valley | 4,158 | 3,721 | 17.6 | 20.1 |
| Pawhuska | 1,591 | 1,417 | 2.9 | 13.6 |
| Ponca City | 16,913 | 15,089 | 17.1 | 14.0 |
| Poteau | 4,556 | 4,152 | 5.4 | 12.6 |
| Sand Springs | 8,387 | 7,408 | 3.0 | -2.9 |
| Sapulpa | 12,660 | 11,576 | 6.1 | 9.4 |
| Seminole | 5,557 | 5,218 | 0.9 | 15.2 |
| Shawnee | 33,840 | 30,547 | 43.8 | 46.5 |
| Stillwater | 26,667 | 25,946 | 15.8 | 12.9 |
| Tahlequah | 7,427 | 6,653 | -0.7 | 5.1 |
| Tulsa | 252,618 | 229,636 | 11.1 | 8.5 |
| Watonga | 1,601 | 1,484 | -4.2 | 4.7 |
| Weatherford | 5,575 | 5,406 | 10.1 | 18.7 |
| Wewoka | 1,119 | 1,059 | -1.0 | 19.6 |
| Woodward | 11,981 | 10,820 | 11.9 | 21.9 |
| **Total** | 1,109,827 | 1,005,601 | 9.7 | 8.6 |

## RETAIL TRADE IN METRO AREAS AND STATE
($000)

| | | | | | Percentage Change | | |
|---|---|---|---|---|---|---|---|
| | Jan. '88 | Jan. '87 | Dec. '87 | Jan. '88 | Jan. '88/'87 | Jan./Dec. '88/'87 | |
| Retail Trade | Adjusted | Adjusted | Adjusted | Unadjusted | Adjusted | Adjusted | Unadjusted |
| **OKLAHOMA CITY MSA** | | | | | | | |
| Food Group | 188,499 | 188,185 | 188,526 | 179,718 | 0.2 | -0.0 | -6.6 |
| Apparel | 13,581 | 14,033 | 14,603 | 10,850 | -3.2 | -7.0 | -56.9 |
| General Merchandise Group | 71,996 | 57,513 | 63,169 | 56,675 | 25.2 | 14.0 | -48.9 |
| Furniture & Appliances | 18,204 | 21,617 | 20,884 | 16,965 | -15.8 | -12.8 | -34.9 |
| Lumber & Building Materials | 12,775 | 13,893 | 14,367 | 9,168 | -8.0 | -11.1 | -15.8 |
| Auto Dealers | 166,131 | 137,507 | 125,210 | 152,787 | 20.8 | 32.7 | 31.1 |
| Service Stations | 14,969 | 18,282 | 15,350 | 15,855 | -18.1 | -2.5 | 4.7 |
| All Other | 80,296 | 64,894 | 74,975 | 57,647 | 23.7 | 7.1 | -44.3 |
| Total | 566,451 | 515,924 | 517,084 | 499,666 | 9.8 | 9.5 | -16.8 |
| **TULSA MSA** | | | | | | | |
| Food Group | 110,412 | 110,298 | 109,213 | 104,227 | 0.1 | 1.1 | -10.3 |
| Apparel | 16,886 | 13,734 | 12,325 | 14,098 | 23.0 | 37.0 | -35.3 |
| General Merchandise Group | 63,146 | 44,251 | 56,004 | 49,456 | 42.7 | 12.8 | -45.2 |
| Furniture & Appliances | 10,971 | 12,461 | 10,426 | 11,591 | -12.0 | 5.2 | -16.8 |
| Lumber & Building Materials | 10,213 | 11,855 | 11,649 | 7,574 | -13.9 | -12.3 | -26.2 |
| Auto Dealers | 96,663 | 80,009 | 72,853 | 88,897 | 19.6 | 31.3 | 31.1 |
| Service Stations | 12,299 | 15,020 | 12,611 | 13,026 | -18.1 | -2.5 | 4.7 |
| All Other | 11,613 | 14,720 | 15,762 | 9,967 | -21.1 | -26.3 | -39.6 |
| Total | 332,203 | 302,348 | 300,843 | 298,836 | 9.9 | 10.4 | -14.4 |
| **ENID MSA** | | | | | | | |
| Food Group | 9,143 | 9,583 | 9,232 | 8,957 | -4.6 | -1.0 | -7.3 |
| Apparel | 1,315 | 1,616 | 1,352 | 1,189 | -18.6 | -2.7 | -41.3 |
| General Merchandise Group | 5,090 | 3,925 | 4,347 | 3,840 | 29.7 | 17.1 | -49.1 |
| Furniture & Appliances | 1,060 | 1,072 | 1,000 | 945 | -1.1 | 6.0 | -17.7 |
| Lumber & Building Materials | 1,298 | 1,279 | 1,103 | 882 | 1.5 | 17.7 | 18.1 |
| Auto Dealers | 9,509 | 7,870 | 7,167 | 8,745 | 20.8 | 32.7 | 31.1 |
| Service Stations | 1,104 | 1,349 | 1,132 | 1,169 | -18.2 | -2.5 | 4.7 |
| All Other | 3,341 | 3,178 | 3,600 | 2,387 | 5.1 | -7.2 | -53.6 |
| Total | 31,860 | 29,872 | 28,933 | 28,114 | 6.7 | 10.1 | -17.4 |
| **LAWTON MSA** | | | | | | | |
| Food Group | 16,632 | 16,960 | 16,324 | 15,586 | -1.9 | 1.9 | -2.2 |
| Apparel | 1,734 | 2,113 | 1,708 | 1,366 | -17.9 | 1.5 | -50.2 |
| General Merchandise Group | 12,940 | 11,068 | 12,517 | 10,079 | 16.9 | 3.4 | -50.5 |
| Furniture & Appliances | 2,480 | 2,360 | 2,133 | 2,316 | 5.1 | 16.3 | -7.4 |
| Lumber & Building Materials | 1,490 | 1,417 | 2,077 | 1,137 | 5.2 | -28.3 | -26.7 |
| Auto Dealers | 12,671 | 10,488 | 9,549 | 11,653 | 20.8 | 32.7 | 31.1 |
| Service Stations | 753 | 920 | 772 | 798 | -18.2 | -2.5 | 4.7 |
| All Other | 3,175 | 4,543 | 5,323 | 1,897 | -30.1 | -40.4 | -60.3 |
| Total | 51,875 | 49,869 | 50,403 | 44,832 | 4.0 | 2.9 | -22.0 |
| **MUSKOGEE AREA** | | | | | | | |
| Food Group | 11,322 | 11,638 | 11,155 | 10,502 | -2.7 | 1.5 | -2.3 |
| Apparel | 1,569 | 1,776 | 1,735 | 1,334 | -11.7 | -9.6 | -51.2 |
| General Merchandise Group | 4,416 | 3,188 | 4,218 | 3,417 | 38.5 | 4.7 | -51.9 |
| Furniture & Appliances | 917 | 1,018 | 1,094 | 846 | -9.9 | -16.2 | -34.0 |
| Lumber & Building Materials | 314 | 468 | 332 | 206 | -32.9 | -5.4 | -28.2 |
| Auto Dealers | 7,996 | 6,621 | 6,020 | 7,350 | 20.8 | 32.8 | 31.1 |
| Service Stations | 962 | 1,178 | 988 | 1,021 | -18.3 | -2.6 | 4.7 |
| All Other | 3,634 | 3,844 | 3,477 | 2,274 | -5.5 | 4.5 | -49.9 |
| Total | 31,130 | 29,731 | 29,019 | 26,950 | 4.7 | 7.3 | -19.0 |
| **STATE**[a] | | | | | | | |
| **Durable Goods** | 565,069 | 494,043 | 451,069 | 508,319 | 14.4 | 25.3 | 12.5 |
| Auto Dealers | 415,066 | 343,622 | 318,829 | 381,731 | 20.8 | 30.2 | 31.1 |
| Accessory Dealers | 26,795 | 25,821 | 26,291 | 22,459 | 3.8 | 1.9 | -17.6 |
| Total Automotive | 441,861 | 369,443 | 345,120 | 404,190 | 19.6 | 28.0 | 26.9 |
| Furniture & Appliances | 26,686 | 30,135 | 26,437 | 25,240 | -11.4 | 0.9 | -15.7 |
| Household Appliances | 22,620 | 18,854 | 19,674 | 20,887 | 20.0 | 15.0 | -10.8 |
| Total Furniture and Appliances | 42,284 | 41,185 | 39,895 | 40,545 | 2.7 | 6.0 | -13.2 |
| Lumber and Building Materials | 43,322 | 46,566 | 46,302 | 30,224 | -7.0 | -6.4 | -19.8 |
| Hardware Stores | 5,923 | 4,860 | 5,572 | 4,623 | 21.9 | 6.3 | -23.6 |
| Total Lumber, Building Materials & Hardware | 49,245 | 51,426 | 51,874 | 34,847 | -4.2 | -5.1 | -20.3 |
| **Nondurable Goods** | 862,486 | 959,424 | 852,656 | 789,058 | -10.1 | 1.2 | -24.9 |
| Apparel | 54,792 | 51,867 | 49,277 | 44,594 | 5.6 | 11.2 | -45.8 |
| Drug Stores | 42,690 | 49,489 | 41,193 | 38,075 | -13.7 | 3.6 | -29.0 |
| Eating and Drinking Places | 162,329 | 161,128 | 148,883 | 142,584 | 0.7 | 9.0 | 1.0 |
| Food Group | 348,865 | 413,613 | 352,491 | 350,679 | -15.7 | -1.0 | -5.3 |
| Service Stations | 49,156 | 60,047 | 50,404 | 52,061 | -18.1 | -2.5 | 4.7 |
| General Merchandise Group | 144,221 | 154,156 | 157,370 | 110,929 | -6.4 | -8.4 | -60.6 |
| **Total Retail Trade** | 1,427,639 | 1,453,532 | 1,304,327 | 1,297,377 | -1.8 | 9.5 | -13.7 |

[a] Total includes data for categories not shown in the table.

## ENID AND LAWTON MSAs
## MUSKOGEE MA

| Category | Jan. '88 | Jan. '87 | Dec. '87 | Percentage Change Jan. '88/'87 | Percentage Change Jan./Dec. '88/'87 |
|---|---|---|---|---|---|
| **ENID MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 29,900 | 30,800 | 30,225 | -2.9 | -1.1 |
| Total Employment | 27,925 | 28,125 | 28,600 | -0.7 | -2.4 |
| Unemployment Rate (%) | 6.6 | 8.7 | 5.4 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 0 | 10 | 312 | — | — |
| Number of Units | 0 | 1 | 2 | — | — |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Number of Units | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 53 | 11 | 5 | 390.7 | E |
| Industrial ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Institutional ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 1,206 | 396 | 0 | 204.8 | — |
| All Other Nonbuilding ($000) | 0 | 14 | 6 | — | — |
| Total Construction ($000) | 1,259 | 430 | 323 | 192.6 | 289.9 |
| **LAWTON MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 49,000 | 49,305 | 50,200 | -6.2 | -0.4 |
| Total Employment | 46,325 | 46,800 | 47,950 | -1.0 | -3.4 |
| Unemployment Rate (%) | 5.5 | 5.1 | 4.5 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 1,363 | 951 | 629 | 43.4 | 116.8 |
| Number of Units | 15 | 13 | 10 | 15.4 | 50.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 0 | 340 | 0.0 | — |
| Number of Units | 0 | 0 | 24 | 0.0 | — |
| Nonresidential | | | | | |
| Commercial ($000) | 260 | 156 | 300 | 66.7 | -13.3 |
| Industrial ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Institutional ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 0 | 0 | 352 | 0.0 | — |
| All Other Nonbuilding ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Total Construction ($000) | 1,623 | 1,107 | 1,621 | 46.7 | 0.2 |
| **MUSKOGEE MA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 31,975 | 33,300 | 33,050 | -4.0 | -3.3 |
| Total Employment | 28,825 | 30,200 | 30,275 | -4.6 | -4.8 |
| Unemployment Rate (%) | 9.9 | 9.3 | 8.4 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 0 | 484 | 0 | — | 0.0 |
| Number of Units | 0 | 7 | 0 | — | 0.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Number of Units | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 0 | 150 | 0 | — | 0.0 |
| Industrial ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Institutional ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| All Other Nonbuilding ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Total Construction ($000) | 0 | 634 | 0 | — | 0.0 |

Note: Includes revisions. E = Exceeds 600 percent.

Sources for all tables: Local utilities companies; 10th Federal Reserve District Member Banks; Federal Home Loan Bank of Topeka; Oklahoma Employment Security Commission; United States Department of Commerce, Construction Statistics Division; Oklahoma Department of Transportation, *Progressive Report of the Transportation Director;* Center for Economic and Management Research, College of Business Administration, The University of Oklahoma. The data for all tables were compiled by Marjorie E. Earley, Statistician for CEMR and Brian M. Hickey, Research Assistant.

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**Center for Economic and Management Research**
**University of Oklahoma**
**Norman, Oklahoma 73069**

## OKLAHOMA CITY AND TULSA MSAs

| Category | Jan. '88 | Jan. '87 | Dec. '87 | Percentage Change<br>Jan. '88/'87 | Percentage Change<br>Jan./Dec. '88/'87 |
|---|---|---|---|---|---|
| **OKLAHOMA CITY MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 496,600 | 506,200 | 504,000 | -1.9 | -1.5 |
| Total Employment | 465,000 | 472,600 | 497,100 | -1.6 | -6.5 |
| Unemployment Rate (%) | 6.4 | 6.6 | 4.9 | — | — |
| **Mortgage Loans Closed ($000,000)**[a] | 217.7 | 317.9 | 12.9 | -31.6 | 0.8 |
| **Bank Deposits ($000,000)**[b] | | | | | |
| Demand Deposits | 845 | 906 | 881 | -6.8 | -4.1 |
| Time and Savings Deposits | 1,084 | 2,054 | 1,188 | -47.2 | -8.7 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 4,573 | 7,983 | 4,733 | -42.7 | -3.4 |
| Number of Units | 67 | 140 | 70 | -52.1 | -4.3 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 0 | 430 | 0.0 | — |
| Number of Units | 0 | 0 | 21 | 0.0 | — |
| Nonresidential | | | | | |
| Commercial ($000) | 6,303 | 8,591 | 2,490 | -26.6 | 153.1 |
| Industrial ($000) | 2,040 | 481 | 0 | 323.8 | — |
| Institutional ($000) | 0 | 0 | 230 | 0.0 | — |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 16,312 | 2,593 | 16,190 | 529.0 | 0.8 |
| All Other Nonbuilding ($000) | 0 | 167 | 41 | — | — |
| Total Construction ($000) | 29,228 | 19,815 | 24,114 | 47.5 | 21.2 |
| **General Business Index** | NA | NA | NA | NA | NA |
| **TULSA MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 338,900 | 349,000 | 342,500 | -2.9 | -1.1 |
| Total Employment | 310,700 | 316,900 | 318,900 | -2.0 | -2.6 |
| Unemployment Rate (%) | 8.3 | 9.2 | 6.9 | — | — |
| **Mortgage Loans Closed ($000,000)**[a] | 246.5 | 277.2 | 14.7 | -11.0 | -29.0 |
| **Bank Deposits ($000,000)**[b] | | | | | |
| Demand Deposits | 943 | 896 | 897 | 5.2 | 5.1 |
| Time and Savings Deposits | 2,198 | 2,410 | 2,197 | -8.8 | 0.1 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 6,234 | 7,539 | 5,482 | -17.3 | 13.7 |
| Number of Units | 88 | 107 | 78 | -17.8 | 12.8 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 148 | 74 | — | — |
| Number of Units | 0 | 4 | 2 | — | — |
| Nonresidential | | | | | |
| Commercial ($000) | 486 | 5,233 | 6,043 | -90.7 | -92.0 |
| Industrial ($000) | 4,130 | 60 | 0 | E | — |
| Institutional ($000) | 600 | 170 | 429 | 252.9 | 39.9 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 303 | 865 | 0 | -65.0 | — |
| All Other Nonbuilding ($000) | 91 | 193 | 130 | -53.1 | -30.3 |
| Total Construction ($000) | 11,843 | 14,208 | 12,158 | -16.6 | -2.6 |
| **General Business Index** | NA | NA | NA | NA | NA |

Note: Includes revisions. E = Exceeds 600 percent. NA = Not Available

[a] By Savings and Loan Associations, 12 months and December data

[b] Total deposits of large commercial banks

## CONSTRUCTION, STATE

| Category | Jan. '88 | Jan. '87 | Dec. '87 | Percentage Change<br>Jan '88/'87 | Percentage Change<br>Jan./Dec. '88/'87 |
|---|---|---|---|---|---|
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 12,691 | 18,843 | 12,648 | -32.7 | 0.3 |
| Number of Units | 177 | 290 | 177 | -39.0 | 0.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 101 | 252 | 1,174 | -59.9 | -91.4 |
| Number of Units | 5 | 9 | 55 | -44.4 | -90.9 |
| Nonresidential | | | | | |
| Commercial ($000) | 7,741 | 15,523 | 9,014 | -50.1 | -14.1 |
| Industrial ($000) | 8,500 | 550 | 675 | E | E |
| Institutional ($000) | 1,362 | 1,230 | 685 | 10.8 | 98.9 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 34,063 | 11,370 | 37,554 | 199.6 | -9.3 |
| All Other Nonbuilding ($000) | 100 | 381 | 207 | -73.8 | -51.8 |
| Total Construction ($000) | 64,557 | 48,150 | 61,957 | 34.1 | 4.2 |

Note: Includes revisions. E = Exceeds 600 percent.

### NOTICE:

Beginning with this issue of the *Oklahoma Business Bulletin*, construction activity in Street and Highway Construction will be reported as of the month in which the contracts are awarded rather than for the month in which work began as has been the case in the past. This step has been taken so as to render Street and Highway Construction more comparable with the other sectors of Construction which are reported for the months in which building permits are issued.

5/25/88 U8130-1 A

# OKLAHOMA BUSINESS BULLETIN

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THE UNIVERSITY OF OKLAHOMA

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May 1988

VOL. 56, ISSUE 5

CONGRESSIONAL INFO. SERVICE/SRI
ATTN: ROBERTA B. MASON
4520 EAST-WEST HIGHWAY
BETHESDA MD 20814

## SUMMARY OF INDICATORS

| Category | 2 Mos. '88 | 2 Mos. '87 | Feb. '88 | Percentage Change 2 Mos. '88/'87 | Percentage Change Feb./Jan. '88 |
|---|---|---|---|---|---|
| **Personal Income (Monthly Average)** | | | | | |
| Unadjusted ($000,000) | 3,492 | 3,380 | 3,507 | 3.3 | 0.9 |
| Adjusted for CPI ($000,000) | 3,014 | 3,034 | 3,023 | -0.7 | 0.6 |
| **Crude Oil Production (000 bbl)**[a] | 9,985 | 10,947 | 9,985 | -8.8 | -5.1 |
| **Industrial Power Sales (000,000 Kwh)**[b] | 1,357 | 1,288 | 668 | 5.4 | -3.0 |
| **Total Bank Deposits (Monthly Average) ($000,000)**[c] | | | | | |
| Demand | 7,606 | 7,556 | 7,517 | 0.7 | -2.3 |
| Savings | 24,608 | 26,304 | 24,590 | -6.5 | -0.2 |
| **Savings and Loan Associations ($000,000)** | | | | | |
| Assets | 19,861.8 | 19,759.1 | 9,662.5 | 0.5 | -5.3 |
| Mortgage Loans Closed | 75.8 | 156.4 | 39.4 | -51.6 | 8.4 |
| **Employment**[d] | | | | | |
| Total Labor Force (000) | 1,522.6 | 1,565.0 | 1,517.8 | -2.7 | -0.6 |
| Total Employment (000) | 1,413.8 | 1,429.6 | 1,415.8 | -1.1 | 0.3 |
| Unemployment Rate (%) | 7.2 | 8.6 | 6.7 | — | — |
| **General Business Index** | 95.2 | 91.7 | 95.9 | 3.8 | 1.6 |

Note: Includes revisions.

[a] 1 month and January data.

[b] Sales of larger privately owned utility companies.

[c] Total deposits of all depository institutions.

[d] Civilian Labor Force.

## RETAIL TRADE IN SELECTED CITIES
($000)

| City | Feb. '88 Adjusted | Feb. '88 Unadjusted | Adjusted '88/'87 2 Mos. | Adjusted 1988 Feb./Jan. |
|---|---|---|---|---|
| Ada | 13,336 | 12,052 | -0.6 | 0.4 |
| Altus | 12,875 | 11,560 | 7.4 | 0.8 |
| Alva | 3,875 | 3,502 | 8.7 | 2.5 |
| Anadarko | 4,713 | 4,208 | 17.3 | -4.7 |
| Ardmore | 18,730 | 16,614 | 5.8 | -6.8 |
| Bartlesville | 18,777 | 17,032 | 2.9 | -4.7 |
| Blackwell | 3,184 | 2,892 | 18.5 | -13.2 |
| Broken Arrow | 19,186 | 16,861 | 11.4 | -3.9 |
| Chickasha | 9,263 | 8,447 | 8.7 | -1.2 |
| Clinton | 6,666 | 6,168 | 13.2 | -2.3 |
| Cushing | 5,185 | 4,526 | 3.6 | -2.4 |
| Del City | 10,310 | 9,478 | -20.5 | -8.3 |
| Duncan | 14,631 | 13,290 | 13.8 | 3.9 |
| Durant | 10,573 | 9,406 | 21.4 | -8.5 |
| Edmond | 25,891 | 23,571 | 12.9 | 3.0 |
| Elk City | 7,877 | 7,155 | 14.1 | 4.4 |
| El Reno | 7,734 | 7,193 | 7.7 | 0.4 |
| Guthrie | 5,536 | 4,978 | 8.8 | 7.8 |
| Guymon | 4,362 | 3,877 | 4.5 | -6.8 |
| Henryetta | 4,695 | 4,066 | 6.0 | 0.6 |
| Hobart | 2,347 | 2,153 | 4.2 | 0.2 |
| Holdenville | 2,675 | 2,441 | 3.1 | 0.6 |
| Hugo | 2,703 | 2,522 | 15.1 | -15.9 |
| Idabel | 3,594 | 3,264 | -3.6 | 0.6 |
| Lawton | 46,910 | 42,205 | 2.3 | -3.3 |
| McAlester | 9,532 | 8,320 | 10.5 | -17.0 |
| Miami | 10,644 | 9,703 | 6.8 | -18.5 |
| Midwest City | 35,866 | 31,921 | 11.5 | 2.2 |
| Moore | 14,663 | 12,994 | 11.4 | 0.1 |
| Muskogee | 27,455 | 23,963 | 4.2 | -8.4 |
| Norman | 60,898 | 56,871 | 10.8 | -3.9 |
| Oklahoma City | 280,545 | 246,603 | 8.1 | 1.8 |
| Okmulgee | 4,885 | 4,571 | -0.4 | -9.8 |
| Pauls Valley | 4,177 | 3,864 | 16.2 | 0.5 |
| Pawhuska | 1,679 | 1,503 | 3.3 | 4.2 |
| Ponca City | 15,782 | 13,846 | 12.9 | -7.5 |
| Poteau | 4,414 | 4,075 | 5.3 | -1.9 |
| Sand Springs | 8,496 | 7,259 | 6.4 | 1.2 |
| Sapulpa | 12,489 | 11,293 | 6.6 | -1.2 |
| Seminole | 6,027 | 5,579 | 6.9 | 8.9 |
| Shawnee | 24,668 | 21,718 | 26.3 | -27.5 |
| Stillwater | 24,313 | 21,414 | 10.8 | -9.2 |
| Tahlequah | 7,696 | 6,775 | 2.1 | 3.1 |
| Tulsa | 234,893 | 213,628 | 7.0 | -7.2 |
| Watonga | 1,769 | 1,583 | 0.2 | 9.1 |
| Weatherford | 5,282 | 4,984 | 10.7 | -5.4 |
| Wewoka | 1,045 | 966 | -3.1 | -7.2 |
| Woodward | 11,315 | 10,133 | 11.0 | -6.3 |
| **Total** | 1,074,161 | 963,027 | 8.0 | -3.8 |

## RETAIL TRADE IN METRO AREAS AND STATE
($000)

| | | | | | Percentage Change | | |
|---|---|---|---|---|---|---|---|
| | 2 Mos. '88 | 2 Mos. '87 | Feb. '88 | | 2 Mos. '88/'87 | Feb./Jan. '88 | |
| Retail Trade | Adjusted | Adjusted | Adjusted | Unadjusted | Adjusted | Adjusted | Unadjusted |
| **OKLAHOMA CITY MSA** | | | | | | | |
| Food | 379,604 | 372,351 | 191,099 | 180,455 | 1.9 | 1.4 | 0.4 |
| Apparel | 29,389 | 30,796 | 14,627 | 11,447 | -4.6 | -0.9 | -3.5 |
| General Merchandise | 136,475 | 116,812 | 64,326 | 51,506 | 16.8 | -10.8 | -9.1 |
| Furniture | 38,255 | 43,895 | 19,996 | 18,159 | -12.8 | 9.5 | 7.0 |
| Lumber | 29,727 | 27,080 | 16,859 | 12,878 | 9.8 | 31.0 | 40.5 |
| Auto Dealers | 319,736 | 270,413 | 151,854 | 148,941 | 18.2 | -9.5 | -2.5 |
| Service Stations | 31,629 | 35,090 | 16,394 | 14,801 | -9.9 | 7.6 | -6.6 |
| All Other | 154,504 | 129,640 | 75,931 | 53,500 | 19.2 | -3.4 | -5.5 |
| Total | 1,119,319 | 1,026,077 | 551,086 | 491,687 | 9.1 | -3.0 | -1.6 |
| **TULSA MSA** | | | | | | | |
| Food | 216,065 | 219,862 | 106,116 | 100,496 | -1.7 | -3.5 | -3.6 |
| Apparel | 30,805 | 27,625 | 13,827 | 10,556 | 11.5 | -18.6 | -25.1 |
| General Merchandise | 114,584 | 92,504 | 51,046 | 40,015 | 23.9 | -19.7 | -19.1 |
| Furniture | 22,750 | 22,626 | 11,629 | 11,341 | 0.5 | 4.6 | -2.2 |
| Lumber | 22,106 | 23,625 | 11,964 | 9,100 | -6.4 | 18.0 | 20.1 |
| Auto Dealers | 168,747 | 159,339 | 71,323 | 67,805 | 5.9 | -26.8 | -23.7 |
| Service Stations | 25,986 | 28,827 | 13,468 | 12,160 | -9.9 | 7.6 | -6.6 |
| All Other | 27,214 | 31,057 | 16,722 | 11,392 | -12.4 | 59.4 | 15.4 |
| Total | 628,257 | 605,465 | 296,095 | 262,865 | 3.8 | -10.9 | -12.0 |
| **ENID MSA** | | | | | | | |
| Food | 18,295 | 18,862 | 9,137 | 8,360 | -3.0 | -0.2 | -6.7 |
| Apparel | 2,801 | 3,002 | 1,467 | 1,233 | -6.7 | 10.0 | 3.7 |
| General Merchandise | 9,043 | 7,861 | 3,924 | 2,929 | 15.0 | -23.3 | -23.7 |
| Furniture | 2,285 | 2,300 | 1,210 | 1,076 | -0.7 | 12.6 | 13.9 |
| Lumber | 2,576 | 2,561 | 1,278 | 906 | 0.6 | -1.5 | 2.7 |
| Auto Dealers | 18,300 | 15,476 | 8,692 | 8,525 | 18.2 | -9.5 | -2.5 |
| Service Stations | 2,332 | 2,587 | 1,208 | 1,091 | -9.9 | 7.6 | -6.7 |
| All Other | 6,196 | 6,303 | 3,056 | 2,180 | -1.7 | -2.6 | -8.7 |
| Total | 61,828 | 58,952 | 29,972 | 26,300 | 4.9 | -5.9 | -6.5 |
| **LAWTON MSA** | | | | | | | |
| Food | 33,054 | 33,174 | 16,474 | 15,265 | -0.4 | -0.6 | -2.1 |
| Apparel | 3,665 | 3,871 | 1,908 | 1,484 | -5.3 | 8.6 | 8.6 |
| General Merchandise | 23,897 | 23,520 | 11,159 | 9,421 | 1.6 | -12.4 | -6.5 |
| Furniture | 5,054 | 4,298 | 2,571 | 2,441 | 17.6 | 3.5 | 5.4 |
| Lumber | 2,843 | 3,021 | 1,598 | 1,266 | -5.9 | 28.4 | 33.0 |
| Auto Dealers | 24,386 | 20,626 | 11,582 | 11,360 | 18.2 | -9.5 | -2.5 |
| Service Stations | 1,592 | 1,766 | 825 | 745 | -9.9 | 7.6 | -6.6 |
| All Other | 6,388 | 8,334 | 2,964 | 2,313 | -23.4 | -13.4 | -11.1 |
| Total | 100,879 | 98,610 | 49,081 | 44,295 | 2.3 | -5.2 | -1.2 |
| **MUSKOGEE AREA** | | | | | | | |
| Food | 21,278 | 23,414 | 10,061 | 9,250 | -9.1 | -10.3 | -11.9 |
| Apparel | 3,234 | 3,460 | 1,671 | 1,295 | -6.5 | 6.9 | -2.9 |
| General Merchandise | 8,143 | 6,190 | 3,818 | 2,736 | 31.6 | -11.7 | -19.9 |
| Furniture | 1,830 | 2,220 | 868 | 753 | -17.6 | -9.8 | -11.0 |
| Lumber | 713 | 911 | 395 | 297 | -21.7 | 24.2 | 44.2 |
| Auto Dealers | 15,391 | 13,020 | 7,308 | 7,165 | 18.2 | -9.6 | -2.5 |
| Service Stations | 2,037 | 2,265 | 1,056 | 953 | -10.1 | 7.6 | -6.7 |
| All Other | 7,054 | 6,549 | 3,405 | 2,306 | 7.7 | -6.7 | 1.4 |
| Total | 59,680 | 58,029 | 28,582 | 24,755 | 2.8 | -8.1 | -8.1 |
| **STATE**[a] | | | | | | | |
| **Durable Goods** | 1,109,470 | 976,156 | 539,162 | 505,983 | 13.7 | -5.5 | -0.5 |
| Auto Dealers | 798,835 | 675,745 | 379,393 | 372,123 | 18.2 | -9.5 | -2.5 |
| Accessory Dealers | 55,065 | 53,223 | 27,859 | 23,310 | 3.5 | 2.4 | 3.8 |
| Total Automotive | 853,900 | 728,968 | 407,252 | 395,433 | 17.1 | -8.8 | -2.2 |
| Furniture | 58,309 | 57,861 | 31,371 | 27,489 | 0.8 | 16.5 | 8.9 |
| Household Appliances | 43,140 | 40,395 | 20,379 | 18,341 | 6.8 | -10.5 | -12.2 |
| Total Furniture and Appliances | 101,449 | 98,256 | 51,750 | 45,830 | 3.2 | 4.1 | -0.6 |
| Lumber and Building Materials | 90,587 | 92,565 | 48,157 | 36,722 | -2.1 | 13.5 | 21.5 |
| Hardware Stores | 11,495 | 10,198 | 5,614 | 4,429 | 12.7 | -4.5 | -4.2 |
| Total Lumber, Building Materials & Hardware | 102,082 | 102,763 | 53,771 | 41,151 | -0.7 | 11.3 | 18.1 |
| **Nondurable Goods** | 1,730,262 | 1,872,667 | 866,551 | 756,858 | -7.6 | 0.3 | -4.1 |
| Apparel | 105,987 | 104,562 | 51,163 | 39,412 | 1.4 | -6.7 | -11.6 |
| Drug Stores | 83,827 | 93,397 | 41,260 | 40,241 | -10.2 | -3.1 | 5.7 |
| Eating and Drinking Places | 317,703 | 321,825 | 155,204 | 140,388 | -1.3 | -4.5 | -1.5 |
| Food Group | 689,709 | 789,784 | 342,970 | 315,155 | -12.7 | -1.1 | -10.1 |
| Service Stations | 103,859 | 115,243 | 53,829 | 48,600 | -9.9 | 7.6 | -6.6 |
| General Merchandise Group | 308,965 | 309,583 | 164,970 | 122,166 | -0.2 | 14.6 | 10.1 |
| **Total Retail Trade** | 2,839,732 | 2,848,823 | 1,405,713 | 1,262,841 | -0.3 | -2.0 | -2.7 |

[a] Total includes data for categories not shown in the table.

## ENID AND LAWTON MSAs
## MUSKOGEE MA

| Category | 2 Mos. '88 | 2 Mos. '87 | Feb. '88 | Percentage Change | |
|---|---|---|---|---|---|
| | | | | 2 Mos. '88/'87 | Feb./Jan. '88 |
| **ENID MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 29,738 | 30,600 | 29,575 | -2.8 | -1.1 |
| Total Employment | 27,875 | 27,950 | 27,825 | -2.7 | -0.4 |
| Unemployment Rate (%) | 6.2 | 8.6 | 5.9 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 0 | 100 | 0 | — | 0.0 |
| Number of Units | 0 | 1 | 0 | — | 0.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Number of Units | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 60 | 16 | 7 | 272.0 | -86.7 |
| Industrial ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Institutional ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 1,206 | 396 | 0 | 204.8 | — |
| All Other Nonbuilding ($000) | 8 | 27 | 8 | -71.7 | — |
| Total Construction ($000) | 1,273 | 449 | 15 | 183.6 | -98.8 |
| **LAWTON MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 49,000 | 49,412 | 49,000 | -0.8 | 0.0 |
| Total Employment | 46,400 | 46,825 | 46,475 | -0.9 | 0.3 |
| Unemployment Rate (%) | 5.4 | 5.2 | 5.2 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 2,999 | 2,064 | 1,636 | 45.3 | 20.0 |
| Number of Units | 35 | 34 | 20 | 2.9 | 33.3 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 160 | 400 | 160 | -60.0 | — |
| Number of Units | 4 | 16 | 4 | -75.0 | — |
| Nonresidential | | | | | |
| Commercial ($000) | 294 | 306 | 34 | -3.9 | -86.9 |
| Industrial ($000) | 0 | 20 | 0 | — | 0.0 |
| Institutional ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 0 | 116 | 0 | — | 0.0 |
| All Other Nonbuilding ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Total Construction ($000) | 3,453 | 2,905 | 1,830 | 18.9 | 12.7 |
| **MUSKOGEE MA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 31,875 | 33,338 | 31,775 | -4.4 | -0.6 |
| Total Employment | 28,812 | 30,262 | 28,800 | -4.8 | -0.1 |
| Unemployment Rate (%) | 9.6 | 9.2 | 9.4 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 0 | 968 | 0 | — | 0.0 |
| Number of Units | 0 | 14 | 0 | — | 0.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Number of Units | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 0 | 496 | 0 | — | 0.0 |
| Industrial ($000) | 0 | 866 | 0 | — | 0.0 |
| Institutional ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 577 | 385 | 577 | 49.6 | — |
| All Other Nonbuilding ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Total Construction ($000) | 577 | 2,716 | 577 | -78.8 | — |

Note: Includes revisions.

Sources for all tables: Local utilities companies; 10th Federal Reserve District Member Banks; Federal Home Loan Bank of Topeka; Oklahoma Employment Security Commission; United States Department of Commerce, Construction Statistics Division; Oklahoma Department of Transportation, *Progressive Report of the Transportation Director;* Center for Economic and Management Research, College of Business Administration, The University of Oklahoma. The data for all tables were compiled by Marjorie E. Earley, Statistician for CEMR and Brian M. Hickey, Research Assistant.

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**Center for Economic and Management Research**
**University of Oklahoma**
**Norman, Oklahoma 73069**

## OKLAHOMA CITY AND TULSA MSAs

| Category | 2 Mos. '88 | 2 Mos. '87 | Feb. '88 | Percentage Change<br>2 Mos.'88/'87 | Percentage Change<br>Feb./Jan. '88 |
|---|---|---|---|---|---|
| **OKLAHOMA CITY MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 496,450 | 507,450 | 496,300 | -2.2 | -0.1 |
| Total Employment | 466,900 | 473,450 | 468,800 | -1.4 | 0.8 |
| Unemployment Rate (%) | 6.0 | 6.7 | 6.5 | — | — |
| **Mortgage Loans Closed ($000,000)**[a] | 10.3 | 12.7 | 10.3 | -18.9 | -20.2 |
| **Bank Deposits ($000,000)**[b] | | | | | |
| Demand Deposits | 828 | 954 | 812 | -13.1 | -3.9 |
| Time and Savings Deposits | 1,087 | 1,998 | 1,090 | -45.6 | -0.6 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 13,660 | 19,327 | 9,144 | -29.3 | 102.4 |
| Number of Units | 201 | 322 | 136 | -37.6 | 109.2 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 100 | 840 | 100 | -88.1 | — |
| Number of Units | 6 | 40 | 6 | -85.0 | — |
| Nonresidential | | | | | |
| Commercial ($000) | 7,968 | 25,069 | 1,665 | -78.2 | -73.6 |
| Industrial ($000) | 2,040 | 506 | 0 | 302.9 | — |
| Institutional ($000) | 3,020 | 932 | 3,020 | 224.0 | — |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 29,720 | 15,480 | 13,407 | 92.0 | -17.8 |
| All Other Nonbuilding ($000) | 14 | 279 | 0 | -95.0 | — |
| Total Construction ($000) | 56,523 | 62,432 | 27,336 | -9.5 | -6.3 |
| **General Business Index** | 92.1 | 85.9 | 93.1 | 7.2 | 2.3 |
| **TULSA MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 338,450 | 350,000 | 338,000 | -3.3 | -0.3 |
| Total Employment | 311,700 | 317,050 | 312,700 | -1.7 | 0.6 |
| Unemployment Rate (%) | 7.9 | 9.4 | 7.5 | — | — |
| **Mortgage Loans Closed ($000,000)**[a] | 7.7 | 39.5 | 7.7 | -80.5 | -64.2 |
| **Bank Deposits ($000,000)**[b] | | | | | |
| Demand Deposits | 908 | 878 | 873 | 3.3 | -7.4 |
| Time and Savings Deposits | 2,186 | 2,415 | 2,173 | -9.5 | -1.2 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 14,128 | 15,567 | 7,894 | -9.2 | 26.6 |
| Number of Units | 190 | 210 | 104 | -9.5 | 20.9 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 65 | 286 | 65 | -77.3 | — |
| Number of Units | 2 | 11 | 2 | -81.8 | — |
| Nonresidential | | | | | |
| Commercial ($000) | 1,314 | 323 | 828 | 306.8 | 70.3 |
| Industrial ($000) | 4,214 | 806 | 84 | 422.8 | -98.0 |
| Institutional ($000) | 600 | 2,331 | 0 | -74.3 | — |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 6,818 | 1,896 | 6,515 | 259.6 | E |
| All Other Nonbuilding ($000) | 248 | 360 | 158 | -31.0 | 73.6 |
| Total Construction ($000) | 27,396 | 27,569 | 15,543 | -0.6 | 31.2 |
| **General Business Index** | 87.1 | 86.8 | 86.7 | 0.4 | -1.0 |

Note: Includes revisions. E = Exceeds 600 percent.

[a] By Savings and Loan Associations, 1 month and January data.

[b] Total deposits in large commercial banks.

## CONSTRUCTION, STATE

| Category | 2 Mos. '88 | 2 Mos. '87 | Feb. '88 | Percentage Change<br>2 Mos. '88/'87 | Percentage Change<br>Feb./Jan. '88 |
|---|---|---|---|---|---|
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 33,435 | 41,985 | 20,534 | -20.4 | 59.2 |
| Number of Units | 464 | 630 | 287 | -26.4 | 62.1 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 520 | 1,917 | 425 | -72.9 | 347.4 |
| Number of Units | 19 | 79 | 14 | -75.9 | 180.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 11,086 | 34,158 | 3,324 | -67.6 | -57.1 |
| Industrial ($000) | 9,716 | 2,207 | 1,216 | 340.3 | -85.7 |
| Institutional ($000) | 4,382 | 4,385 | 3,020 | -0.1 | 121.7 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 60,497 | 41,630 | 26,435 | 45.3 | -22.4 |
| All Other Nonbuilding ($000) | 315 | 692 | 181 | -54.5 | 35.1 |
| Total Construction ($000) | 119,952 | 126,974 | 55,134 | -5.5 | -15.0 |

Note: Includes revisions.

7/11/88 U8130-1 A

# OKLAHOMA BUSINESS BULLETIN

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COLLEGE OF BUSINESS ADMINISTRATION
THE UNIVERSITY OF OKLAHOMA

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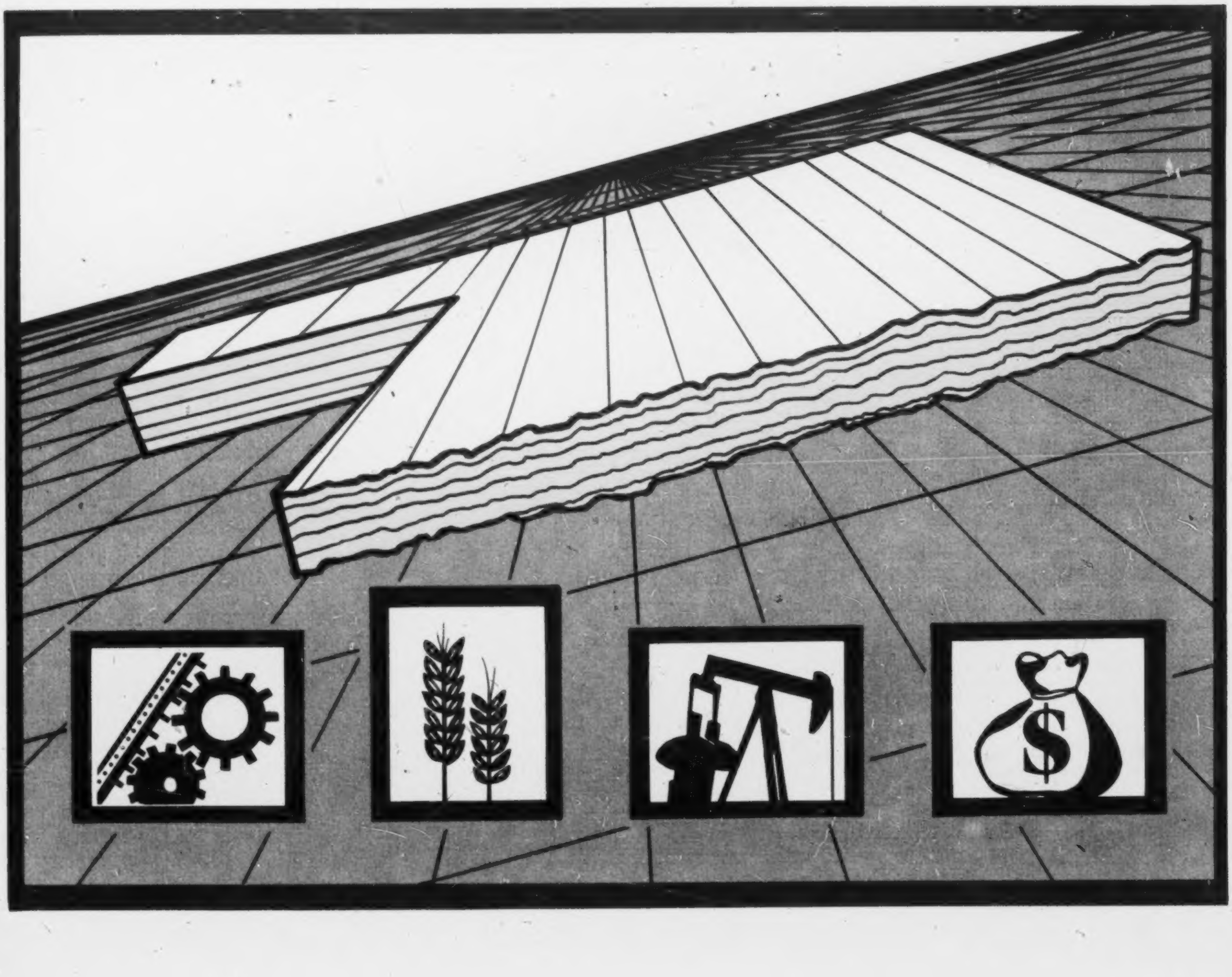

The *Oklahoma Business Bulletin* is now combined with the *Review of Regional Economics and Business*. There will be four quarterly expanded editions of the *Bulletin* which will contain both articles and the usual statistical information on Oklahoma and its major centers. The remaining eight monthly issues of the *Bulletin* will contain only the statistical summaries, although articles on timely subjects might also appear in these interquarterly issues. The combination of these two publications will provide a more thorough examination of economic problems prevalent in Oklahoma as well as continuing to provide economic data which has long been presented in the *Oklahoma Business Bulletin*.

This publication change at the Center has been assisted by funding provided by the Robert S. and Grayce B. Kerr Foundation Inc., for which the Center is most grateful.

We at the Center are most hopeful that the Oklahoma oriented articles will assist State leaders and citizens in their efforts to solve the economic problems now facing the State.

George W. England
Director

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## SUMMARY OF INDICATORS

| Category | 3 Mos. '88 | 3 Mos. '87 | Mar. '88 | Percentage Change<br>3 Mos. '88/'87 | Percentage Change<br>Mar./Feb. '88 |
|---|---|---|---|---|---|
| **Personal Income (Monthly Average)** | | | | | |
| Unadjusted ($000,000) | 3,506 | 3,392 | 3,533 | 3.4 | 0.7 |
| Adjusted for CPI ($000,000) | 3,009 | 3,039 | 3,033 | -1.0 | 0.3 |
| **Crude Oil Production (000 bbl)** | 32,993 | 33,631 | 11,018 | -1.9 | 0.4 |
| **Industrial Power Sales (000,000 Kwh)**[a] | 2,022 | 1,928 | 665 | 4.9 | -0.4 |
| **Total Bank Deposits (Monthly Average) ($000,000)**[b] | | | | | |
| Demand | 7,561 | 7,534 | 7,472 | 0.4 | -0.6 |
| Savings | 24,613 | 26,066 | 24,625 | -5.6 | 0.1 |
| **Savings and Loan Associations ($000,000)** | | | | | |
| Assets | 10,229 | 9,942 | 10,287 | 2.9 | 0.8 |
| Mortgage Loans Closed | 129 | 240 | 54 | -46.3 | 35.8 |
| **General Business Index** | 95.5 | 93.1 | 96.1 | 2.6 | 0.2 |

Note: Includes revisions.

[a] Sales of larger privately owned utility companies.

[b] Total deposits of all depository institutions.

## SELECTED ECONOMIC INDICATORS

| Category | 3 Mos. '88 | 3 Mos. '87 | Mar. '88 | Percentage Change<br>3 Mos. '88/'87 | Percentage Change<br>Mar./Feb. '88 |
|---|---|---|---|---|---|
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 63,491 | 75,275 | 30,056 | -15.7 | 46.4 |
| Number of Units | 851 | 1,155 | 387 | -26.3 | 34.8 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 636 | 11,473 | 116 | -94.5 | -72.7 |
| Number of Units | 37 | 505 | 18 | -92.7 | 28.6 |
| Nonresidential | | | | | |
| Commercial ($000) | 19,694 | 44,640 | 8,508 | -55.9 | 156.0 |
| Industrial ($000) | 9,776 | 2,832 | 60 | 245.2 | -95.1 |
| Institutional ($000) | 8,330 | 9,441 | 3,948 | -11.8 | 30.7 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 102,145 | 51,329 | 41,647 | 99.0 | 57.5 |
| All Other Nonbuilding ($000) | 994 | 1,235 | 680 | -19.4 | 276.5 |
| Total Construction ($000) | 205,067 | 196,224 | 85,015 | 4.5 | 54.2 |
| **EMPLOYMENT TRENDS** | | | | | |
| Total Labor Force (000)[a] | 1,525.3 | 1,568.8 | 1,525.2 | -2.8 | 0.1 |
| Total Employment (000) | 1,416.6 | 1,433.5 | 1,420.5 | -1.2 | 0.2 |
| Manufacturing (000) | 154.7 | 154.0 | 154.6 | 0.5 | -1.1 |
| Mining (000) | 44.1 | 45.6 | 44.2 | -3.3 | 1.4 |
| Government (000) | 249.2 | 250.5 | 252.6 | -0.5 | 0.7 |
| Contract Construction (000) | 30.2 | 32.8 | 31.3 | -7.9 | 2.6 |
| Services (000) | 229.4 | 226.7 | 231.3 | 1.2 | 0.2 |
| Retail Trade (000) | 202.2 | 208.0 | 202.4 | -2.8 | 0.5 |
| Unemployment Rate (%) | 7.1 | 8.6 | 6.9 | — | — |
| **Average Weekly Hours** | | | | | |
| Manufacturing (Per Worker) | 40.8 | 41.3 | 40.4 | -1.2 | -1.2 |
| **Average Weekly Earnings** | | | | | |
| Manufacturing ($ Per Worker) | 419.51 | 408.81 | 414.10 | 2.6 | -0.8 |
| Contract Construction ($ Per Worker) | 408.50 | 416.24 | 419.34 | -1.9 | 2.6 |
| Retail Trade Excluding Eating and Drinking Places ($ Per Worker) | 186.10 | 188.32 | 187.17 | -1.2 | 0.8 |

Note: Includes revisions in some previous months. Streets and highways data reflect construction started in current month(s).

[a] Civilian Labor Force.

## RETAIL TRADE IN METRO AREAS AND STATE
($000)

| | | | | | Percentage Change | | |
|---|---|---|---|---|---|---|---|
| | 3 Mos. '88 | 3 Mos. '87 | Mar. '88 | | 3 Mos. '88/'87 | Mar./Apr. '88 | |
| Retail Trade | Adjusted | Adjusted | Adjusted | Unadjusted | Adjusted | Adjusted | Unadjusted |
| **OKLAHOMA CITY MSA** | | | | | | | |
| Food | 567,905 | 553,197 | 188,568 | 191,445 | 2.7 | -1.2 | 6.1 |
| Apparel | 46,042 | 46,049 | 16,542 | 16,796 | -0.0 | 12.9 | 46.7 |
| General Merchandise | 192,753 | 174,980 | 56,389 | 51,727 | 10.2 | -11.9 | 0.4 |
| Furniture | 56,781 | 64,741 | 18,576 | 16,289 | -12.3 | -6.1 | -10.3 |
| Lumber | 42,832 | 40,961 | 13,195 | 13,393 | 4.6 | -21.3 | 4.0 |
| Auto Dealers | 439,347 | 400,758 | 118,182 | 106,615 | 9.6 | -22.6 | -28.4 |
| Service Stations | 48,850 | 52,114 | 16,920 | 14,951 | -6.3 | 2.1 | 1.0 |
| All Other | 210,790 | 183,676 | 59,744 | 57,742 | 14.8 | -19.5 | 7.9 |
| Total | 1,605,300 | 1,516,476 | 488,116 | 468,958 | 5.9 | -11.2 | -4.6 |
| **TULSA MSA** | | | | | | | |
| Food | 324,764 | 327,784 | 108,520 | 109,872 | -0.9 | 2.2 | 9.3 |
| Apparel | 44,756 | 42,311 | 13,897 | 13,285 | 5.8 | 0.2 | 25.9 |
| General Merchandise | 171,887 | 139,783 | 57,236 | 55,101 | 23.0 | 12.2 | 37.7 |
| Furniture | 39,654 | 34,386 | 16,140 | 14,922 | 15.3 | 32.1 | 31.6 |
| Lumber | 32,114 | 35,373 | 10,173 | 10,106 | -9.2 | -12.9 | 11.1 |
| Auto Dealers | 255,635 | 233,185 | 68,765 | 62,033 | 9.6 | -22.6 | -28.4 |
| Service Stations | 40,134 | 42,812 | 13,901 | 12,283 | -6.3 | 2.1 | 1.0 |
| All Other | 38,955 | 43,483 | 12,019 | 11,969 | -10.4 | -28.2 | 5.1 |
| Total | 947,899 | 899,117 | 300,651 | 289,571 | 5.4 | -4.3 | 2.8 |
| **ENID MSA** | | | | | | | |
| Food | 26,375 | 27,092 | 8,218 | 8,060 | -2.6 | -9.2 | -3.6 |
| Apparel | 4,062 | 4,394 | 1,304 | 1,296 | -7.6 | -9.4 | 5.1 |
| General Merchandise | 13,050 | 11,799 | 3,991 | 3,755 | 10.6 | 0.6 | 28.2 |
| Furniture | 3,163 | 3,204 | 968 | 936 | -1.3 | -14.3 | -13.0 |
| Lumber | 3,733 | 3,802 | 1,171 | 1,133 | -1.8 | -7.7 | 25.1 |
| Auto Dealers | 25,146 | 22,936 | 6,764 | 6,102 | 9.6 | -22.6 | -28.4 |
| Service Stations | 3,601 | 3,843 | 1,247 | 1,102 | -6.3 | 2.0 | 1.0 |
| All Other | 9,255 | 9,588 | 3,156 | 2,667 | -3.5 | 6.8 | 22.3 |
| Total | 88,385 | 86,658 | 26,819 | 25,051 | 2.0 | -9.9 | -4.7 |
| **LAWTON MSA** | | | | | | | |
| Food | 46,676 | 48,246 | 13,811 | 14,134 | -3.3 | -15.6 | -7.4 |
| Apparel | 5,458 | 5,703 | 1,790 | 1,785 | -4.3 | -6.2 | 20.3 |
| General Merchandise | 38,515 | 34,934 | 14,466 | 13,531 | 10.3 | 28.0 | 43.6 |
| Furniture | 7,079 | 6,457 | 2,064 | 2,081 | 9.6 | -18.8 | -14.7 |
| Lumber | 4,402 | 4,718 | 1,569 | 1,535 | -6.7 | -1.2 | 21.2 |
| Auto Dealers | 33,510 | 30,568 | 9,014 | 8,132 | 9.6 | -22.6 | -28.4 |
| Service Stations | 2,459 | 2,622 | 851 | 752 | -6.2 | 1.9 | 0.9 |
| All Other | 10,549 | 12,018 | 4,104 | 4,120 | -12.2 | 39.0 | 78.1 |
| Total | 148,648 | 145,263 | 47,669 | 46,070 | 2.3 | -3.0 | 4.0 |
| **MUSKOGEE AREA** | | | | | | | |
| Food | 31,599 | 34,717 | 10,341 | 10,221 | -9.0 | 3.0 | 10.5 |
| Apparel | 4,832 | 5,104 | 1,599 | 1,665 | -5.3 | -4.3 | 28.6 |
| General Merchandise | 12,144 | 9,599 | 4,035 | 3,827 | 26.5 | 6.0 | 39.9 |
| Furniture | 3,153 | 3,173 | 1,343 | 1,163 | -0.6 | 57.8 | 54.4 |
| Lumber | 1,101 | 1,366 | 387 | 380 | -19.4 | 0.5 | 27.9 |
| Auto Dealers | 21,133 | 19,280 | 5,684 | 5,129 | 9.6 | -22.6 | -28.4 |
| Service Stations | 3,165 | 3,383 | 1,108 | 963 | -6.4 | 3.7 | 1.0 |
| All Other | 9,983 | 9,619 | 2,857 | 2,785 | 3.8 | -17.3 | 20.8 |
| Total | 87,110 | 86,241 | 27,354 | 26,133 | 1.0 | -4.4 | 5.6 |
| **STATE**[a] | | | | | | | |
| **Durable Goods** | 1,559,547 | 1,452,854 | 447,367 | 411,460 | 7.3 | -17.2 | -18.7 |
| Auto Dealers | 1,097,666 | 1,001,464 | 295,264 | 266,374 | 9.6 | -22.6 | -28.4 |
| Accessory Dealers | 84,290 | 82,562 | 28,739 | 27,860 | 2.1 | 2.2 | 19.5 |
| Total Automotive | 1,181,956 | 1,084,026 | 324,003 | 294,234 | 9.0 | -20.9 | -25.6 |
| Furniture | 91,200 | 86,788 | 32,534 | 32,217 | 5.1 | 3.6 | 17.2 |
| Household Appliances | 63,304 | 59,249 | 20,043 | 18,532 | 6.8 | -1.9 | 1.0 |
| Total Furniture and Appliances | 154,504 | 146,037 | 52,577 | 50,749 | 5.8 | 1.4 | 10.7 |
| Lumber and Building Materials | 132,643 | 137,488 | 42,663 | 42,362 | -3.5 | -10.6 | 15.4 |
| Hardware Stores | 17,057 | 15,615 | 5,550 | 5,440 | 9.2 | -1.2 | 22.8 |
| Total Lumber, Building Materials & Hardware | 149,700 | 153,103 | 48,213 | 47,802 | -2.2 | -9.6 | 16.2 |
| **Nondurable Goods** | 2,627,238 | 2,778,723 | 889,376 | 860,471 | -5.5 | 2.1 | 13.7 |
| Apparel | 161,288 | 156,652 | 54,609 | 55,291 | 3.0 | 5.7 | 40.3 |
| Drug Stores | 125,149 | 136,563 | 41,118 | 40,828 | -8.4 | -0.7 | 1.5 |
| Eating and Drinking Places | 469,868 | 473,673 | 152,696 | 157,094 | -0.8 | -1.4 | 11.9 |
| Food Group | 1,043,221 | 1,160,013 | 353,183 | 350,169 | -10.1 | 2.9 | 11.1 |
| Service Stations | 160,401 | 171,149 | 55,553 | 49,092 | -6.3 | 2.1 | 1.0 |
| General Merchandise Group | 478,174 | 470,790 | 168,221 | 148,859 | 1.6 | 1.5 | 21.8 |
| **Total Retail Trade** | 4,186,785 | 4,231,577 | 1,336,743 | 1,271,931 | -1.1 | -5.3 | 0.7 |

[a] Total includes data for categories not shown in the table.

## RETAIL TRADE IN SELECTED CITIES
($000)

| | 3 Mos. '88 | 3 Mos. '87 | Mar. '88 | | Percentage Change | | |
|---|---|---|---|---|---|---|---|
| | | | | | 3 Mos. '88/'87 | Mar./Feb. '88 | |
| Retail Trade | Adjusted | Adjusted | Adjusted | Unadjusted | Adjusted | Adjusted | Unadjusted |
| Ada | 39,466 | 39,955 | 12,877 | 12,419 | -1.2 | -3.3 | 3.0 |
| Altus | 36,374 | 35,356 | 10,657 | 10,292 | 2.9 | -16.8 | -11.0 |
| Alva | 11,024 | 10,672 | 3,406 | 3,189 | 3.3 | -11.7 | -8.9 |
| Anadarko | 13,950 | 12,695 | 4,373 | 4.277 | 9.9 | -6.0 | 1.6 |
| Ardmore | 56,841 | 53,778 | 18,097 | 16,703 | 5.7 | -2.9 | 0.5 |
| Bartlesville | 55,930 | 55,428 | 17,582 | 16,622 | 0.9 | -5.4 | -2.4 |
| Blackwell | 10,740 | 8,595 | 3,842 | 3,718 | 25.0 | 18.5 | 28.6 |
| Broken Arrow | 56,338 | 52,086 | 17,188 | 16,632 | 8.2 | -10.3 | -1.4 |
| Chickasha | 26,955 | 25,596 | 8.213 | 7,986 | 5.3 | -12.4 | -5.5 |
| Clinton | 19,187 | 17,787 | 5,593 | 5,225 | 7.9 | -17.5 | -15.3 |
| Cushing | 15,353 | 15,093 | 4,904 | 4,931 | 1.7 | -4.8 | 8.9 |
| Del City | 31,211 | 36,075 | 9,887 | 9,552 | -13.5 | -3.1 | 0.8 |
| Duncan | 41,940 | 37,978 | 13,237 | 12,583 | 10.4 | -9.5 | -5.3 |
| Durant | 32,324 | 27,681 | 10,235 | 9,235 | 16.8 | -2.9 | -1.8 |
| Edmond | 72,246 | 67,276 | 20,859 | 20,473 | 7.4 | -19.8 | -13.1 |
| Elk City | 21,951 | 20,364 | 6,437 | 6,123 | 7.8 | -19.3 | -14.4 |
| El Reno | 21,714 | 21,336 | 6,167 | 6,042 | 1.8 | -20.8 | -16.0 |
| Guthrie | 15,380 | 14,543 | 4,662 | 4,472 | 5.8 | -17.4 | -10.2 |
| Guymon | 13,054 | 12,916 | 4,045 | 3,815 | 1.1 | -6.6 | -1.6 |
| Henryetta | 13,906 | 13,110 | 4,569 | 4,396 | 6.1 | -2.3 | 8.1 |
| Hobart | 6,775 | 6,640 | 2,066 | 1,969 | 2.0 | -13.0 | -8.5 |
| Holdenville | 7,703 | 7,663 | 2,354 | 2,291 | 0.5 | -11.5 | -6.1 |
| Hugo | 8,451 | 7,527 | 2,567 | 2,329 | 12.3 | -4.2 | -7.7 |
| Idabel | 10,457 | 11,041 | 3,338 | 3,213 | -5.3 | -6.2 | -1.6 |
| Lawton | 140,840 | 137,487 | 45,812 | 43,826 | 2.4 | -1.9 | 3.8 |
| McAlester | 30,281 | 27,149 | 9,318 | 8,942 | 11.5 | -1.8 | 7.5 |
| Miami | 33,160 | 31,579 | 10,415 | 10,294 | 5.0 | -2.3 | 6.1 |
| Midwest City | 102,730 | 95,343 | 31,841 | 31,899 | 7.7 | -11.1 | -0.1 |
| Moore | 43,322 | 38,856 | 14,127 | 13,697 | 11.5 | -3.2 | 5.4 |
| Muskogee | 83,480 | 81,872 | 26,151 | 24,960 | 2.0 | -4.4 | 4.2 |
| Norman | 178,282 | 167,067 | 53,830 | 50,280 | 6.7 | -11.7 | -11.6 |
| Oklahoma City | 795,626 | 765,075 | 240,372 | 230,732 | 4.0 | -14.2 | -6.4 |
| Okmulgee | 15,065 | 14,920 | 4,749 | 4,654 | 1.0 | -3.0 | 1.8 |
| Pauls Valley | 12,122 | 10,670 | 3,845 | 3,574 | 13.6 | -7.1 | -7.5 |
| Pawhuska | 4,865 | 4,741 | 1,587 | 1,471 | 2.6 | -5.0 | -2.1 |
| Ponca City | 48,763 | 43,043 | 15,825 | 14,879 | 13.3 | -0.2 | 7.5 |
| Poteau | 13,078 | 12,511 | 4,185 | 4,000 | 4.5 | -4.8 | -1.8 |
| Sand Springs | 24,422 | 23,721 | 7,562 | 7,438 | 3.0 | -10.8 | 2.5 |
| Sapulpa | 36,249 | 35.041 | 11,057 | 10,802 | 3.4 | -11.6 | -4.3 |
| Seminole | 16,830 | 16,499 | 5,183 | 5,008 | 2.0 | -15.8 | -10.2 |
| Shawnee | 83,223 | 68,749 | 24,396 | 22,596 | 21.1 | -1.5 | 4.0 |
| Stillwater | 74,571 | 68,305 | 23,488 | 21,251 | 9.2 | -3.3 | -0.8 |
| Tahlequah | 22,447 | 22,143 | 7,271 | 6,895 | 1.4 | -6.0 | 1.8 |
| Tulsa | 721,785 | 679,237 | 233,559 | 224,232 | 6.3 | -0.6 | 5.0 |
| Watonga | 5,008 | 5,014 | 1,629 | 1,533 | -0.1 | -7.4 | -3.2 |
| Weatherford | 15,896 | 14,713 | 5,040 | 4,700 | 8.0 | -4.4 | -5.7 |
| Wewoka | 3,123 | 3,342 | 956 | 914 | -6.6 | -8.2 | -5.4 |
| Woodward | 33,182 | 30,968 | 9,790 | 9,267 | 7.1 | -13.4 | -8.4 |
| **Total Selected Cities** | 3,177,620 | 3,009,236 | 989,143 | 946,331 | 5.6 | -7.9 | -1.7 |

## ENID AND LAWTON MSAs

| Category | 3 Mos. '88 | 3 Mos. '87 | Mar. '88 | Percentage Change<br>3 Mos. '88/'87 | Percentage Change<br>Mar./Feb. '88 |
|---|---|---|---|---|---|
| **ENID MSA** | | | | | |
| **Employment (Number)[a]** | | | | | |
| Labor Force | 29,833 | 30,583 | 29,875 | -2.5 | 0.5 |
| Total Employment | 27,992 | 27,950 | 28,125 | 0.2 | 0.7 |
| Unemployment Rate (%) | 6.2 | 8.6 | 5.9 | — | — |
| **Industrial Power Sales (000 Kwh)** | 111,629 | 110,219 | 35,554 | 1.3 | -1.3 |
| **PERMIT-AUTHORIZED CONSTRUCTION[a]** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 90 | 10 | 90 | E | — |
| Number of Units | 1 | 1 | 1 | 0.0 | — |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Number of Units | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 190 | 22 | 130 | E | E |
| Industrial ($000) | 0 | 444 | 0 | — | 0.0 |
| Institutional ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 1,206 | 396 | 0 | 204.8 | 0.0 |
| All Other Nonbuilding ($000) | 33 | 71 | 26 | -53.0 | 234.2 |
| Total Construction ($000) | 1,519 | 943 | 246 | 61.2 | E |
| **LAWTON MSA** | | | | | |
| **Employment (Number)[a]** | | | | | |
| Labor Force | 49,441 | 49,542 | 50,025 | -0.2 | 1.5 |
| Total Employment | 46,692 | 46,958 | 47,100 | -0.6 | 1.0 |
| Unemployment Rate (%) | 5.6 | 5.2 | 5.8 | — | — |
| **Industrial Power Sales (000 Kwh)** | 45,177 | 44,072 | 15,161 | 2.5 | -2.2 |
| **PERMIT-AUTHORIZED CONSTRUCTION[a]** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 5,007 | 5,551 | 2,007 | -9.8 | 22.7 |
| Number of Units | 64 | 87 | 29 | -26.4 | 45.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 180 | 400 | 20 | -55.0 | -87.5 |
| Number of Units | 6 | 16 | 2 | -62.5 | -50.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 498 | 1,035 | 204 | -51.9 | 500.0 |
| Industrial ($000) | 0 | 20 | 0 | — | 0.0 |
| Institutional ($000) | 1,000 | 0 | 1,000 | — | — |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 1,848 | 116 | 1,848 | E | — |
| All Other Nonbuilding ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Total Construction ($000) | 8,532 | 7,122 | 5,079 | 19.8 | 177.5 |

[a] Includes revisions.

E = exceeds 600 percent.

## MUSKOGEE MA

| Category | 3 Mos. '88 | 3 Mos. '87 | Mar. '88 | Percentage Change<br>3 Mos. '88/'87 | Percentage Change<br>Mar./Feb. '88 |
|---|---|---|---|---|---|
| **Employment (Number)[a]** | | | | | |
| Labor Force | 31,990 | 33,367 | 31,950 | -4.1 | -0.2 |
| Total Employment | 28,858 | 30,292 | 28,950 | -4.7 | -0.4 |
| Unemployment Rate (%) | 9.6 | 9.2 | 9.2 | — | — |
| **Industrial Power Sales (000 Kwh)** | 43,971 | 47,584 | 15,030 | -7.6 | 3.0 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 216 | 520 | 216 | -58.4 | — |
| Number of Units | 2 | 6 | 2 | -66.7 | — |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 75 | 0 | — | 0.0 |
| Number of Units | 0 | 2 | 0 | — | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 400 | 5,275 | 400 | -92.4 | — |
| Industrial ($000) | 0 | 20 | 0 | — | 0.0 |
| Institutional ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 577 | 385 | 0 | 49.6 | — |
| All Other Nonbuilding ($000) | 5 | 0 | 5 | — | — |
| Total Construction ($000) | 1,197 | 6,275 | 621 | -80.9 | 7.6 |

[a] Includes revisions.

## TULSA MSA

| Category | 3 Mos. '88 | 3 Mos. '87 | Mar. '88 | Percentage Change | |
|---|---|---|---|---|---|
| | | | | 3 Mos. '88/'87 | Mar./Feb. '88 |
| **Employment (Number)** | | | | | |
| Labor Force | 339,333 | 350,500 | 340,000 | -3.2 | 0.3 |
| Total Employment | 312,667 | 317,367 | 314,000 | -1.5 | 0.2 |
| Manufacturing | 47,333 | 47,400 | 47,600 | -0.1 | 0.6 |
| Mining | 15,067 | 15,000 | 15,000 | 0.4 | 0.7 |
| Government | 35,967 | 36,400 | 36,100 | -1.2 | -0.8 |
| Wholesale and Retail Trade | 69,067 | 69,300 | 69,100 | -0.3 | 0.7 |
| Unemployment Rate (%) | 7.8 | 9.4 | 7.6 | — | — |
| **Average Weekly Earnings** | | | | | |
| Manufacturing ($ Per Worker) | 450.86 | 425.63 | 444.39 | 5.9 | -0.5 |
| **Industrial Power Sales (000 Kwh)** | 521,960 | 484,712 | 170,200 | 7.7 | -1.2 |
| **Mortgage Loans Closed ($000,000)**[a] | 21.7 | 59.6 | 14.0 | -63.6 | 81.8 |
| **Bank Deposits ($000,000)**[b] | | | | | |
| Demand Deposits | 894 | 868 | 866 | 3.0 | -0.8 |
| Time and Savings Deposits | 2,178 | 2,415 | 2,162 | -9.8 | -0.5 |
| **Air Transportation** | | | | | |
| Passengers Enplaning (Number) | 307,577 | 311,314 | 124,024 | -1.2 | 33.6 |
| Passengers Deplaning (Number) | 308,445 | 317,300 | 122,451 | -2.8 | 31.8 |
| Freight (Tons) | 4,979 | 3,698 | 1,991 | 34.6 | 40.4 |
| **Water Transportation** | | | | | |
| Tulsa Port of Catoosa | | | | | |
| Tons In | 147,300 | 108,380 | 50,732 | 35.9 | -12.7 |
| Tons Out | 365,150 | 341,231 | 89,118 | 7.0 | -34.1 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 25,070 | 30,317 | 10,943 | -17.0 | 38.6 |
| Number of Units | 324 | 432 | 134 | -25.0 | 28.8 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 65 | 9,971 | 0 | -99.3 | — |
| Number of Units | 2 | 441 | 0 | -99.5 | — |
| Nonresidential | | | | | |
| Commercial ($000) | 3,157 | 7,242 | 1,918 | -56.4 | 131.8 |
| Industrial ($000) | 4,214 | 1,260 | 0 | 234.3 | — |
| Institutional ($000) | 750 | 3,446 | 150 | -78.2 | — |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 14,475 | 4,756 | 7,657 | 204.4 | 17.5 |
| All Other Nonbuilding ($000) | 851 | 635 | 603 | 33.9 | 282.7 |
| Total Construction | 48,582 | 57,527 | 21,271 | -15.5 | 36.8 |
| **General Business Index** | 86.7 | 87.6 | 85.9 | 0.0 | -6.5 |

Note: Includes revisions.
[a] By Savings and Loan Associations. 2 Months and February data.
[b] Deposits of large commercial banks.

## OKLAHOMA CITY MSA

| Category | 3 Mos. '88 | 3 Mos. '87 | Mar. '88 | Percentage Change<br>3 Mos. '88/'87 | Percentage Change<br>Mar./Feb. '88 |
|---|---|---|---|---|---|
| **Employment (Number)** | | | | | |
| Labor Force | 497,300 | 508,900 | 498,500 | -2.3 | 0.3 |
| Total Employment | 467,900 | 474,367 | 470,300 | -1.4 | 0.4 |
| Manufacturing | 46,933 | 47,200 | 47,000 | -0.6 | 0.6 |
| Mining | 11,000 | 11,700 | 11,100 | -6.0 | 1.8 |
| Government | 95,733 | 97,200 | 97,200 | -1.5 | 0.9 |
| Wholesale and Retail Trade | 98,133 | 99,800 | 98,300 | -1.7 | 0.5 |
| Unemployment Rate (%) | 5.9 | 6.8 | 5.7 | — | — |
| **Average Weekly Earnings** | | | | | |
| Manufacturing ($ Per Worker) | 465.83 | 443.98 | 462.18 | 4.9 | -0.1 |
| **Industrial Power Sales (000 Kwh)** | 281,577 | 287,725 | 94,326 | -2.1 | -4.1 |
| **Mortgage Loans Closed ($000,000)**[a] | 18.5 | 25.9 | 8.2 | -28.6 | -20.4 |
| **Bank Deposits ($000,000)**[b] | | | | | |
| Demand Deposits | 807 | 945 | 763 | -14.6 | -6.0 |
| Time and Savings Deposits | 1,092 | 1,922 | 1,104 | -43.2 | 1.2 |
| **Air Transportation** | | | | | |
| Passengers Enplaning (Number) | 329,717 | 332,979 | 131,389 | -1.0 | 29.6 |
| Passengers Deplaning (Number) | 337,380 | 341,528 | 133,583 | -1.2 | 33.3 |
| Freight Enplaned (Tons) | 1,394 | 1,593 | 477 | -12.5 | 3.3 |
| Freight Deplaned (Tons) | 2,261 | 2,582 | 861 | -12.4 | 19.6 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 27,951 | 33,438 | 14,290 | -16.4 | 56.3 |
| Number of Units | 390 | 562 | 189 | -30.6 | 39.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 100 | 915 | 0 | -89.1 | — |
| Number of Units | 6 | 44 | 0 | -86.4 | — |
| Nonresidential | | | | | |
| Commercial ($000) | 11,863 | 28,850 | 3,895 | -58.9 | 133.9 |
| Industrial ($000) | 2.040 | 983 | 0 | 107.6 | 0.0 |
| Institutional ($000) | 4,698 | 1,272 | 1,678 | 269.3 | -44.4 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 35,272 | 19,333 | 5,552 | 82.4 | -58.6 |
| All Other Nonbuilding ($000) | 40 | 482 | 26 | -91.7 | — |
| Total Construction ($000) | 81,964 | 85,273 | 25,441 | -3.9 | -6.9 |
| **General Business Index** | 90.9 | 86.7 | 88.4 | 4.8 | -5.0 |

Note: Includes revisions.

[a] By Savings and Loan Associations. 2 months and February data.

[b] Deposits of large commercial banks.

Sources for all tables: Local utilities companies; 10th Federal Reserve District Member Banks; Federal Home Loan Bank of Topeka; Oklahoma Employment Security Commission; United States Department of Commerce, Construction Statistics Division; Oklahoma Department of Transportation, *Progressive Report of the Transportation Director;* Center for Economic and Management Research, College of Business Administration, The University of Oklahoma. The data for all tables were compiled by Marjorie E. Earley, Statistician for CEMR and Brian Hickey, Research Assistant.

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# Business Highlights

### Neil J. Dikeman, Jr.

Oklahoma's economic situation at the end of the first quarter of 1988 showed some evidence of improvement over the same period last year but not to the extent that many had hoped for. There were some sectors of the economy that showed moderate gains over last year while others continued below year ago levels. Thus, it's safe to say that while economic recovery may be near at hand, it hasn't arrived as yet.

**Employment**

Employment increased for the second successive month during March but, despite these recent upturns, average monthly employment for the year remained 1.2 percent below that of this time last year compared with a lag of only 1.1 percent in the average noted in February. The March increase in employment was shared by all economic sectors except manufacturing which was off the February total by 1.1 percent. However, for the year to date the level of employment remained about 700 jobs higher than was the case at this time a year ago.

A comparison of average monthly employment by economic activity during the first three months of this year with that of the same period of 1987, revealed that only the service trades and manufacturing enjoyed increases. These gains were, however, relatively small and therefore were more than offset by losses of 3.3 percent in mining, 7.9 percent in construction, 2.8 percent in retail trade, 0.5 percent in government and 1.8 percent in all other economic sectors.

The lag in average monthly employment during this year was overshadowed by an average decline of 43,000 job seekers in the work force thereby causing the number of unemployed to decline by 9,000 persons and the average monthly unemployment rate to reach 7.1 percent which was the lowest for at least the past two years.

**Retail Sales**

The lag which has been noted in retail sales from year ago levels became more evident during March than was the case in earlier months of the year. Where, at the end of February, the dollar sales for the year were only 0.3 percent less than for a comparable period last year, the difference at the end of the first quarter of this year had grown to 1.1 percent. The increase in the margin between this year's sales volume and that of the first quarter of 1987 was caused by a less than expected increase in sales during March which, after seasonal adjustment, were more than 5 percent below February at a time when a 6 percent increase was expected. Some portion of the reticence on the part of consumers to make purchases during March was undoubtedly caused by the uncertainty of the impact the revised income tax codes would have on their pocketbooks. It is generally expected that seasonally adjusted April sales, too, will be less than expected because of this uncertainty as well as the actual impact of the new tax levies.

The quarterly drop in the total volume of sales was due to a decline of 5.5 percent in non-durable goods purchases which more than offset the 7.3 percent increase in sales of durable merchandise lines. The principal culprit among the non-durable lines was grocery store sales which were off 1987 levels by more than 10 percent although a decline of 8.4 percent in sales of drug stores and one of 6.3 percent in sales at service stations also contributed to the size of the decline.

Had it not been for increases in sales of the automotive group which registered a 9.6 percent increase over the first quarter of last year; hardware stores which enjoyed a 9.2 percent rise and furniture and appliance sales which were 5.8 percent more than at this time a year ago, the gap between sales thus far in 1988 and those of 1987 would have been significantly larger. Unfortunately, past experience indicates that these merchandise lines are ones which are generally most heavily impacted during tax paying time in April.

Geographically, total sales for the first quarter in the five larger trade centers were 5.3 percent ahead of 1987 despite a drop of 8.4 percent during March. This increase extended both to urban and rural merchants located in these centers. Sales in the remainder of the State, however, were 12.6 percent below the level of last year due principally both to the predominance of non-durable goods merchants in the areas outside the five large centers and the apparent decline in population of many of the counties in these non-metropolitan areas.

### Construction

Construction activity during the first quarter of the year as measured by the dollar volume of building permits issued increased over the year ago level by 4.5 percent to register the first such increase since 1984. This gain was triggered by sharp increases in all types of construction activity during March except in multi-family dwellings and industrial buildings. However, despite these latter losses which, in themselves, were sizeable, total construction activity in March was 54.2 percent ahead of February. This boost was of enough significance to offset the decrease experience in February thus providing the impetus for the quarterly gain over the same period of 1987.

### Finance

The financial picture in Oklahoma remains somewhat clouded as deposits in all financial institutions in the state declined by 0.1 percent in March thus marking the second successive monthly decline in this important indicator this year. Because of these recent decreases, the average monthly deposits for the first quarter of the year were 4.2 percent less than at the same time last year as savings deposits were down by 5.6 percent while demand account totals were up by only 0.4 percent.

The activities of thrift institutions, on the other hand, presented a mixed picture as an increase in assets during March reversed the February downturn thereby raising the total for the year 2.9 percent above the level during the same period of 1987. Conversely, however, the March increase of nearly 36 percent in mortgage loans closed was not sufficient to overcome the lags earlier in the year and as a result, the total for the first three months was 46.3 percent less than at this time a year ago.

### Manufacturing

Both indicators of manufacturing activity (i.e. manufacturing employment and industrial power sales) declined in March but this drop was not sufficient to offset the increases which occurred earlier in the year. Thus, for the first quarter of 1988, average monthly manufacturing employment exceeded the average for the same period last year by 0.5 percent (approximately 700 jobs) while industrial power sales for the period were nearly 5 percent ahead of last year. In addition, average weekly wages paid to employees in manufacturing activities rose by nearly $11 per worker over the first quarter of 1987 at a time when average weekly hours worked by these employees dropped which indicates that average hourly wages rose by nearly 4 percent. This, in turn, provides some evidence that the demand for manufacturing workers is beginning to increase.

### Crude Oil and Natural Gas Production

Production of crude oil and natural gas in Oklahoma thus far this year have both registered decreases from the same period a year ago. Natural gas (including casinghead gas) output during the first quarter was 2.2 percent below the same period last year while crude oil production, which has declined rather steadily in recent years, continued this pattern and fell below last year's total by nearly 2 percent. Much of the decline in crude oil production can be attributed to the uncertainty in oil prices which have been prevalent during the past 15 months. However, the drop in natural gas production from year ago levels is due less to pricing policies than to demand, particularly that of residential and commercial customers.

### Personal Income

Personal income (in terms of current dollars) continued to move upward in March so that by the end of the third quarter it exceeded the level of the same period a year ago by 3.4 percent. However, as encouraging as this upward movement seems, the recent increases have remained less than the national rate of inflation so that in terms of real income, the level for the quarter was 1 percent below that of the same period a year ago.

It should be noted that there is considerable question as to whether Oklahoma consumers are impacted by the same inflationary forces as are noted in other parts of the nation. The fact that no Oklahoma communities are included in the regular consumer price surveys conducted by the Bureau of Labor Statistics (on which the Consumer Price Index is based) strongly suggests that prices in Oklahoma may not reflect the rate of inflation noted elsewhere. Some further evidence that this is the case can be found in consumer price indices developed for a number of cities throughout the nation by the American Chamber of Commerce Researchers Association. This price index series includes Oklahoma City and Tulsa, both of which reported cost of living indices which were somewhat below that of the nation for the first quarter of the year thus suggesting that possibly the recent increases in personal income in Oklahoma may in fact have exceeded increases in inflation.

### General Business Index

The combination of the changes in the economic sectors discussed earlier in this report with changes in such other factors as the decline in bankruptcies and bank closings, an increase in sales of manufactured goods to mention a few resulted in an increase of 0.2 percent in the General Business Index of Oklahoma in March. This increase was the fourth such gain since the November 1987 decline and raised the average index for the year to date to 95.5 which was 3.6 percent higher than for the same period a year ago.

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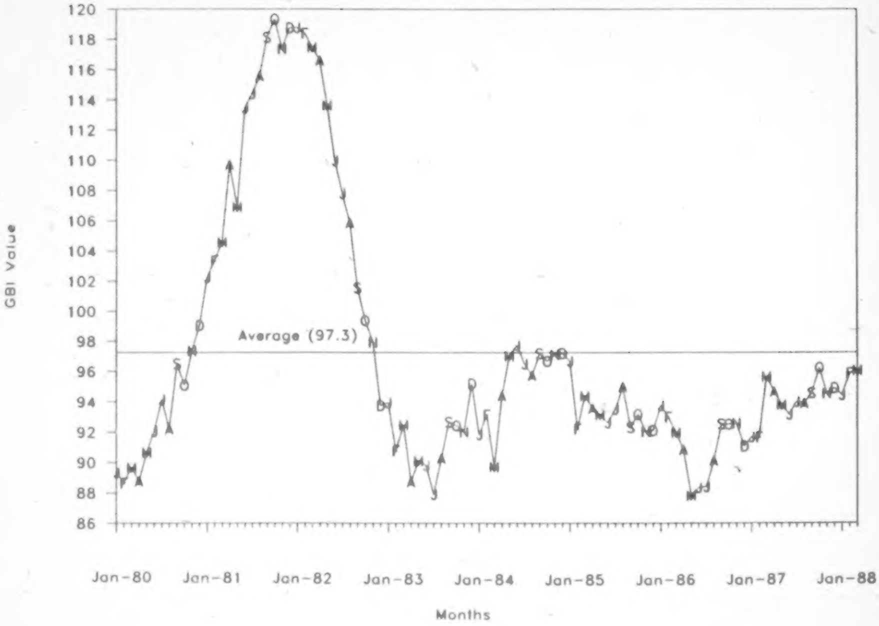
Oklahoma State General Business Index
January 1980 through March 1988



# Are Middle-Paying Jobs Really Declining?

*Garland R. Hadley*
*Mike C. Patterson*

## Introduction

For several years economists and politicians have been concerned about the types of new jobs being created in the United States. Some observers argue that structural changes in the U.S. economy are leading to a bipolarization of earnings — that is, middle paying jobs are decreasing relative to higher and lower paying jobs. In an article in the *Atlantic Monthly* Bob Kuttner argued that as the U.S. economy shifts away from its traditional manufacturing base to high-technology and service industries, the share of jobs providing a middle-class standard of living is shrinking.[1]

A few months later two economists, Barry Bluestone and Bennett Harrison, published the results of an empirical study prepared under contract to the Joint Economic Committe of the U.S. Congress suggesting that the percentage of newly created jobs paying low wages has been rising dramatically. It was concluded, "that 58 percent of all net new employment between 1979 and 1984 paid annual wages of less than $7,000."[2] While the Bluestone-Harrison report has been criticized for comparing data from a growth period with data collected during a severe recession,[3] it does provide data supporting the Kuttner bipolarization hypothesis.

Robert Lawrence of The Brookings Institution examined basically the same data and found that some bipolarization of earnings did occur between 1969 and 1983; however, the argument is presented that it was not structural change, but the changing age-distribution of the labor force that was primarily responsible.[4] While in another study, Neal Rosenthal of the Bureau of Labor Statistics, compared usual weekly earnings in 1973 and 1982 by using three occupational earning groups. This study did not find any significant decline of the percentage of workers in the middle earnings group. It was found that the percentage of workers in the highest paying third increased significantly, while the proportion of workers in the lowest-paying third declined.[5] These findings are, of course, contrary to the conclusions of Bluestone and Harrison, and fail to support the bipolarization hypothesis.

The purpose of this article was to re-examine the data used in the previously cited studies; however, an approach that focuses upon the actual number of jobs being created in each of three occupational pay classes rather than on the earnings of workers was employed. Also the analysis has been extended into the 1982-1985 time period.

## Methodology

This study was based upon current Population Survey data on occupational employment and annual earnings. The data was divided into three distinct time periods for analysis — 1975 through 1978, 1978 through 1981, and 1982 through 1985. There were two reasons for this breakdown: First, the 1981 and earlier data are not fully comparable with the 1982 and later data because of changes in occupational definitions. Second, the breakdown provides data from three different periods of approximately the same length so that changes during three different time periods can be compared.

For each year the number of males in each occupation has been multiplied by the mean annual earnings of males and the same has been done with females. These two products were then summed and divided by the total number of people (men plus women) in that occupation to obtain the mean annual earnings per worker in each occupation per year. These

TABLE 1

Distribution of All Workers
by Occupational Pay Classes
(selected years prior to 1982)

| Occupational Pay Class | Distribution of Employment | | | | | |
|---|---|---|---|---|---|---|
| | 1975 | | 1978 | | 1981 | |
| | Number (thousands) | Distribution (percent) | Number (thousands) | Distribution (percent) | Number (thousands) | Distribution (percent) |
| Top Third | 13,941 | 13.6 | 16,017 | 14.4 | 18,286 | 15.6 |
| Middle Third | 52,423 | 51.3 | 57,004 | 51.2 | 59,274 | 50.6 |
| Bottom Third | 35,832 | 35.1 | 38,282 | 34.4 | 39,613 | 33.8 |
| TOTALS | 102,196 | 100.0 | 111,303 | 100.0 | 117,173 | 100.0 |

results were then used to classify the occupations into three groups — the highest paying third, the middle paying third, and the lowest paying third — each with the same number of occupations. The number of people employed in each occupation at the beginning of each time period was subtracted from the number at the ending in order to determine the number of new jobs in each occupation. These numbers were then summed to calculate the total number of new jobs being created in each pay class in each time period.

The analysis has also been extended by incorporating data from the 1982 through 1985 time period. Previous use of these data was not possible because extensive changes in occupational definitions made it virtually impossible to compare 1982 and subsequent data with those from earlier time periods.

## Distribution of Workers by Occupational Pay Class

The first step was to examine the distribution of workers by occupational pay class. Table 1 shows the numeric and percentage distributions of all workers by occupational pay classes in selected years prior to 1982. These data show that the proportion of workers in each of the three occupational pay classes have remained relatively stable over the entire period from 1975 through 1981. If any significant trend exists, it is toward a slight increase in the proportion of jobs in the top third pay class and a slight decrease in the proportion of jobs in the bottom third pay class. This distribution is quite similar to the distribution found by Rosenthal using usual weekly earnings; and like Rosenthal's analysis these findings do not support the notion of bipolarization.[6] While the data show a very slight decrease (less than one percent) in the proportion of workers in the middle third occupation pay class, it is a weaker trend than either of the other two — certainly not pronounced enough to conclude that a significant redistribution is occurring.

Because of extensive changes in occupational definitions beginning in 1982, the data for 1982 and 1985 are presented in a separate table. Again, the data in Table 2 reflecting changes occurring between 1982 and 1985, show a slight increase in the percentage of workers employed in the highest-paying occupational class, no change in the middle third, and a slight decrease in the percent of workers employed in the lowest-paying third. Thus there does not seem to be any evidence in the changes occurring between 1982 to 1985 to support the contention that middle-paying jobs are declining.

## Job Creation by Occupational Pay Class

The second part of this study dealt with the rate at which new jobs are created in each occupational pay class. To accomplish this analysis the occupational data were sorted by mean earnings at the beginning of the time period, and based upon this sort, the occupations were divided into three classes which were then held constant. Data were accumulated on the number of new jobs being created in each of these three occupational pay classes over time.

TABLE 2

Distribution of All Workers
by Occupational Pay Classes
(1982 and 1985)

| Occupational Pay Class | Distribution of Employment | | | |
|---|---|---|---|---|
| | 1982 | | 1985 | |
| | Number (thousands) | Distribution (percent) | Number (thousands) | Distribution (percent) |
| Top Third | 29,302 | 25.1 | 32,786 | 26.5 |
| Middle Third | 32,608 | 28.0 | 34,741 | 28.0 |
| Bottom Third | 54,643 | 46.9 | 56,417 | 45.5 |
| TOTALS | 116,553 | 100.0 | 123,944 | 100.0 |

**TABLE 3**

**Net Jobs Created by Occupational Pay Class and Annual Rate of Job Creation (three recent time periods)**

| Occupational Pay Class | 1975-1978 |  | 1978-1981 |  | 1982-1985 |  |
|---|---|---|---|---|---|---|
|  | Jobs Created (thousands) | Average Rate of Change (percent) | Jobs Created (thousands) | Average Rate of Change (percent) | Jobs Created (thousands) | Average Rate of Change (percent) |
| Top Third | 2,076 | 8.0 | 2,269 | 4.7 | 3,484 | 4.0 |
| Middle Third | 4,581 | 2.9 | 2,270 | 1.3 | 2,133 | 2.2 |
| Bottom Third | 2,450 | 2.3 | 1,331 | 1.2 | 1,774 | 1.1 |
| TOTAL | 9,107 | 3.0 | 5,870 | 1.8 | 7,391 | 2.1 |

Table 3 shows the results of this analysis. The number of net new jobs created during each of three time periods by pay class is shown, as is the average annual growth rate of new jobs in each pay class during each time period. Again these data show that the highest average annual rates of job creation tend to be in the top third occupational pay class. Growth rates range from 4 to 8 percent per year. The middle third occupational pay class grew at a slower but still positive rate. In the 1975-1978 period, jobs increased at nearly 3 percent per year. The rate of job creation slowed to 1.3 percent per year in the 1978-1981 time period as the national economy sank into recession, and the average annual growth rate increased again during the 1982-1985 economic recovery. The slowest rates of job creation in all three time periods were in the bottom third occupational pay class. The rate at which new jobs are being created in the lowest pay class fell from an average annual rate of increase of 2.3 percent in the 1975-1978 period to 1.1 percent in the 1982-1985 period.

Again this more detailed analysis of the rates of job creation does not support the hypothesis of bipolarization. The trends identified in the data in Tables 1 and 2 seem to become more pronounced in this analysis. New jobs in the top pay class are increasing at a greater rate than in the other two occupational pay classes. Jobs in the lowest paying occupations are growing at a slower rate than jobs in better paying occupations.

## Summary and Conclusions

This article examined the underlying data concerned in current debate as to whether structural changes in the U.S. economy are causing a decline in middle paying jobs resulting in a bipolarization of earnings. Two types of analyses were used. First, the distribution of workers by occupational pay class in selected years was examined. This analysis did not reveal any significant distributional changes to support the bipolarization hypothesis. Second, the rates at which new jobs were being created over three time periods were examined by occupational pay class. Again, this analysis failed to yield any support for the bipolarization hypothesis.

The implications of this analysis are that the United States economy is continuing a well-established pattern of economic growth that includes secular improvements in productivity and income. The growth of employment in the service sector relative to manufacturing seems to be creating new jobs in all occupational pay classes — indeed if anything, this change is accompanied by higher rates of job creation in high-paying occupations than in low-paying occupations.

## Notes

[1] Bob Kuttner, "The Declining Middle," *Atlantic Monthly* (July 1983), pp. 60-72.

[2] Barry Bluestone and Bennett Harrison, *The Great American Job Machine: The Poliferation of Low-Wage Employment in the U.S. Economy* (Washington, D.C.: Joint Economic Committee of Congress, December 1986).

[3] Warren T. Brooks, "Low Pay Jobs: The Big Lie," *Wall Street Journal* (March 25, 1987), p. 26.

[4] Robert Lawrence, "Sectoral Shifts and the Size of the Middle Class," *The Brookings Review* (Fall 1984), pp. 3-11.

[5] Neal H. Rosenthal, "The Shrinking Middle Class: Myth or Reality?" *Monthly Labor Review* (March 1985), pp. 3-10.

[6] *Ibid.*

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# The Economic Impact of Sooner Football

*Neil J. Dikeman, Jr.*

## Introduction

A study was recently conducted by the Center for Economic and Management Research at the University of Oklahoma concerning the financial contributions made by the University's football program to the economy of the Norman-Oklahoma City area. The results of this project indicated that the study area receives an average of nearly $4.8 million per game from attendees at games played in Norman. It further indicated that regular attendees at these games came from such states as Texas, Kansas, Louisiana, Colorado and Arizona in addition to the Oklahoma followers of OU football.

The data on which this study was based were obtained by a sample survey of persons who regularly purchase home-game tickets from the University of Oklahoma Athletic Ticket Office regardless of the state in which these customers live. It should be noted, however, that the findings of this study do not include the contributions of the nearly 10,000 students who regularly attend the games.

## Attendance

In recent years, an average of 65,741 OU football tickets per game are sold to the public. Over 10 percent of these sales are made to residents of such states as Texas, Kansas, Arkansas, Colorado, Arizona, Louisiana and New Mexico. The remaining 90 percent are purchased by Oklahomans of which 14.5 percent are sold to Norman-Oklahoma City area residents (including Norman, Moore, Oklahoma City and other communities in the Oklahoma City MSA) and 75.5 percent to persons outside the immediate Norman area. Thus, a vast majority of persons attending the games come from areas which are some distances away from Norman and thereby create new income to Norman-Oklahoma City Area merchants. With regards to frequency of attendance, 75 percent attend all home games, 24 percent attend an average of three games per season and one percent attend no games regularly but allow others to use those tickets the subscribers do not use. Finally, the average number of persons attending the games as a group is two, this suggests that a total of 32,870 groups annually attend each game. These ratios are translated into numbers of attendees in Table 1.

## Activities of Attendees

Attendees at the home games tend to arrive at various times prior to the games as is witnessed by the fact that one percent of those who attend games, arrive in the area on or before the Thursday preceeding the game while eight percent arrive on Friday and 91 percent arrive on Saturday.[1]

Also, of those who arrive on Saturday, 25.3 percent arrive by 10 a.m.; 54.8 percent arrive by noon and 10.9 percent arrive just before game time. When asked when they began their trip home, 49.8 percent of all attendees leave for home immediately following the game; 42.6 percent leave later Saturday evening and 7.6 percent leave on Sunday or later.

The above ratios indicate that 16.6 percent of the attendees at the home games remain at least one night in the area. Of these, 9.2 percent stay in hotels and motels, 5.8 percent stay with friends or relatives, 1.2 percent stay in motor homes or trailers and 0.4 percent stay in other types of accommodations. When asked where they eat on game day, 15.5 percent eat before coming to Norman, 16.4 percent bring their lunch, 16.2 percent eat in the Stadium, 46.6 percent eat in Norman restaurants (including fast food places) and 5.3 percent eat in friends' or relatives' homes. After the games, however, 38.0 percent eat at home, 24.6 percent eat outside of

### TABLE 1

### Average Annual Attendance at Home Football Games of the University of Oklahoma

| Item | Percent of Total Attendees | Average Number of Attendees Per Game | Average Number of Groups Per Game |
|---|---|---|---|
| Out of State Attendees | 10.1 | 6,640 | 3,320 |
| Norman Area Attendees[a] | 14.5 | 9,532 | 4,766 |
| Other Oklahoma Attendees[b] | 75.4 | 49,569 | 24,784 |
| Total Attendees | 100.0 | 65,741 | 32,870 |
| Attend All Games | 75.1 | 49,371 | 24,685 |
| Attend an Average of 3 Games[b] | 23.9 | 15,712 | 7,856 |
| Attend no Games[b] | 1.0 | 658 | 329 |
| Total | 100.0 | 65,741 | 32,870 |

[a] Norman area includes Oklahoma, Cleveland, McClain, Canadian, Logan and Pottawattomie Counties.

[b] Assuming that the tickets purchased by those who regularly attend only three home games and/or no home games are used by others and that these users spend only one day in Norman.

### TABLE 2

### Activities of Attendees at Home Football Games of the University of Oklahoma

| Item | Percent of Attendees | Number of Attendees | Number of Groups |
|---|---|---|---|
| Arrival | | | |
| Thursday or Before | 1.0 | 658 | 329 |
| Friday | 8.0 | 5,259 | 2,630 |
| Saturday | 91.0 | 59,824 | 29,912 |
| Before 10 a.m. | 25.3 | 16,632 | 8,316 |
| By Noon | 54.8 | 36,026 | 18,013 |
| Just Prior to Kickoff | 10.9 | 7,266 | 3,633 |
| Departure | | | |
| Immediately after Game | 49.8 | 32,739 | 16,370 |
| Later Saturday | 42.6 | 28,006 | 14,003 |
| Sunday or Later | 7.6 | 4,996 | 2,498 |
| Lodging Accommodations | | | |
| Remain at Least One Night[a] | 16.6 | 10,913 | 5,456 |
| Stay in Hotels or Motels | 9.2 | 6,048 | 3,024 |
| Stay with Friends or Relatives | 5.8 | 3,813 | 1,906 |
| Stay in Motor Home | 1.2 | 789 | 394 |
| Stay in Other Accommodation | 0.4 | 263 | 132 |
| Eating Accommodations (Before Game) | | | |
| Eat before Coming | 15.5 | 10,190 | 5,455 |
| Bring Lunch | 16.4 | 10,781 | 5,391 |
| Eat in Stadium | 16.2 | 10,650 | 5,325 |
| Eat with Friends or Relatives | 5.3 | 3,484 | 1,742 |
| Eat in Norman Restaurants | 46.6 | 30,636 | 15,318 |
| Eating Accommodations (After Game) | | | |
| Eat at Home | 38.0 | 24,982 | 12,491 |
| Eat on Way Home | 24.6 | 16,172 | 8,086 |
| Eat with Friends or Relatives | 4.6 | 3,024 | 1,512 |
| Eat in Norman Restaurants | 32.8 | 21,563 | 10,782 |
| Shopping Practices | | | |
| Shop in Norman | 67.8 | 44,572 | 22,286 |
| OU Novelty Shop | 33.0 | 21,694 | 10,847 |
| Campus Corner | 28.6 | 18,802 | 9,401 |
| Sooner Fashion Mall | 5.2 | 3,418 | 1,709 |
| Other Norman Shops | 1.0 | 658 | 329 |

[a] The average stay for all Attendees was 1.34 nights.

Norman while on their way home, 4.6 percent eat with friends or relatives and 32.8 percent eat in Norman restaurants.

Finally, when asked if they shopped in Norman, 67.8 percent of the attendees responded affirmatively and 32.2 percent stated that they did not shop in Norman. Of those who shop in Norman, 33 percent stated that they shopped in the OU Novelty Shop, 28.6 percent shopped at the Campus Corner, 5.2 percent shopped at the Sooner Fashion Mall and one percent shopped elsewhere in Norman. Table 2 records a translation of these ratios to numbers of attendees.

## Expenditures of Attendees

The range of expenditures per group attending home football games was from nothing for those who live in the Norman area and do not eat meals nor seek entertainment in Norman to $2,000 for those who arrive in Norman before Saturday and do not leave before Monday with an average expenditure of $85 per group per game. A breakdown of these expenditures by purpose of expenditure indicates that 35.3 percent was spent for lodging, 27.1 percent for food and beverages, 11.8 percent for transportation (including parking costs), 8.1 percent for entertainment (excluding the cost of football tickets) and 17.7 percent for shopping. The results of applying these data to those of Tables 1 and 2 are shown in Table 3.

### TABLE 3

### Average Per Game Expenditures of Attendee Groups[a] (dollars)

| Item | Expenditure |
|---|---|
| Lodging | $ 986,100 |
| Food and Beverages | 756,010 |
| Transportation | 328,700 |
| Entertainment | 230,090 |
| Shopping | 493,050 |
| Total | $2,793,950 |

[a] At home football games at the University of Oklahoma by purpose of expenditure.

Translating the per game expenditures in the Study Area of attendees at the home football games into total annual income generated by these games indicates that, over a full season, these games generate the amount of $13,969,750 in direct income to the area. However, due to the multiplier effect, these activities create additional income for other businesses in the Study Area who provide goods and services to the hotels, motels, restaurants, shops and other enterprises in which expenditures are made by attendees of $9,918,520. This means that the OU football games played in Owen Stadium generate directly and indirectly an average of $23,888,270 annually in new income to the economies of the Study Area over a five game season.

## Note

[1] It was assumed that those attendees using tickets of persons who do not attend or who do not attend a particular game arrive on Saturday.

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# OKLAHOMA BUSINESS BULLETIN

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THE UNIVERSITY OF OKLAHOMA

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July 1988 VOL. 56, ISSUE 7

## SUMMARY OF INDICATORS

| Category | 4 Mos. '88 | 4 Mos. '87 | Apr. '88 | Percentage Change 4 Mos. '88/'87 | Percentage Change Apr./Mar. '88 |
|---|---|---|---|---|---|
| **Personal Income (Monthly Average)** | | | | | |
| Unadjusted ($000,000) | 3,507 | 3,388 | 3,531 | 3.5 | 0.1 |
| Adjusted for CPI ($000,000) | 3,015 | 3,028 | 3,017 | -0.4 | -0.4 |
| **Crude Oil Production (000 bbl)** | 43,947 | 45,271 | 10,718 | -2.9 | -4.4 |
| **Industrial Power Sales (000,000 Kwh)**[a] | 2,694 | 2,585 | 671 | 4.2 | 0.9 |
| **Total Bank Deposits (Monthly Average) ($000,000)**[b] | | | | | |
| Demand | 7,575 | 7,464 | 7,617 | 1.5 | 1.9 |
| Savings | 24,588 | 25,692 | 24,512 | -4.3 | -0.5 |
| **Savings and Loan Associations ($000,000)** | | | | | |
| Assets | 10,284 | 9,913 | 10,449 | 3.7 | 1.6 |
| Mortgage Loans Closed | 182 | 350 | 53 | -48.0 | -1.9 |
| **Employment** | | | | | |
| Total Labor Force (000)[c] | 1,526.0 | 1,568.8 | 1,527.9 | -2.7 | 0.2 |
| Total Employment (000) | 1,420.4 | 1,436.3 | 1,431.7 | -1.1 | 0.8 |
| Unemployment Rate (%) | 6.9 | 8.4 | 6.3 | — | — |
| **General Business Index** | 94.8 | 93.5 | 92.6 | 1.4 | -3.6 |

Note: Includes revisions.
[a] Sales of larger privately owned utility companies.
[b] Total deposits of all depository institutions.
[c] Civilian Labor Force.

## RETAIL TRADE IN SELECTED CITIES
($000)

| City | Apr. '88 Adjusted | Apr. '88 Unadjusted | Adjusted '88/'87 4 Mos. | Adjusted 1988 Apr./Mar. |
|---|---|---|---|---|
| Ada | 12,594 | 12,804 | -1.2 | -2.0 |
| Altus | 11,309 | 11,631 | 2.2 | 6.7 |
| Alva | 3,416 | 3,396 | 1.9 | 1.3 |
| Anadarko | 4,384 | 4,541 | 6.8 | 0.5 |
| Ardmore | 17,298 | 18,183 | 4.0 | -3.6 |
| Bartlesville | 17,384 | 17,664 | -0.4 | -0.7 |
| Blackwell | 2,971 | 3,040 | 20.5 | -24.0 |
| Broken Arrow | 16,748 | 17,878 | 7.0 | -2.9 |
| Chickasha | 8,052 | 8,419 | 3.2 | -2.5 |
| Clinton | 5,519 | 5,745 | 6.7 | -2.2 |
| Cushing | 5,271 | 5,452 | 2.0 | 7.1 |
| Del City | 9,393 | 10,229 | -10.5 | -4.1 |
| Duncan | 13,786 | 14,632 | 11.7 | 3.6 |
| Durant | 8,817 | 9,550 | 4.0 | -13.5 |
| Edmond | 21,360 | 21,838 | 10.3 | 1.6 |
| Elk City | 6,777 | 6,947 | 6.7 | 5.6 |
| El Reno | 7,011 | 6,973 | 1.9 | 13.8 |
| Guthrie | 4,568 | 4,701 | 4.3 | -1.7 |
| Guymon | 4,426 | 4,482 | 4.1 | 9.1 |
| Henryetta | 4,379 | 4,471 | 4.2 | -3.8 |
| Hobart | 2,098 | 2,088 | 1.4 | 1.5 |
| Holdenville | 2,498 | 2,509 | 0.9 | 5.9 |
| Hugo | 2,385 | 2,464 | 5.4 | -6.2 |
| Idabel | 3,535 | 3,517 | -3.6 | 5.6 |
| Lawton | 44,082 | 45,448 | 2.4 | -3.0 |
| McAlester | 9,253 | 9,352 | 8.5 | -0.4 |
| Miami | 10,295 | 10,417 | 3.5 | -1.3 |
| Midwest City | 31,902 | 32,120 | 5.6 | -0.6 |
| Moore | 11,785 | 12,175 | 7.7 | -16.2 |
| Muskogee | 25,838 | 27,213 | 2.2 | -1.0 |
| Norman | 53,961 | 54,280 | 5.5 | 0.7 |
| Oklahoma City | 230,531 | 241,012 | 1.3 | -4.1 |
| Okmulgee | 4,857 | 4,937 | 0.5 | 2.0 |
| Pauls Valley | 3,799 | 3,965 | 11.2 | -0.9 |
| Pawhuska | 1,628 | 1,672 | -0.2 | 2.5 |
| Ponca City | 15,787 | 16,223 | 12.2 | -0.3 |
| Poteau | 4,166 | 4,115 | 4.5 | 0.0 |
| Sand Springs | 7,722 | 8,261 | 2.0 | 1.0 |
| Sapulpa | 11,608 | 11,734 | 2.2 | 4.8 |
| Seminole | 5,419 | 5,423 | 1.4 | 4.2 |
| Shawnee | 22,110 | 23,226 | 16.7 | -9.9 |
| Stillwater | 22,780 | 23,290 | 7.9 | -2.5 |
| Tahlequah | 6,954 | 7,157 | 0.5 | -3.4 |
| Tulsa | 216,036 | 222,383 | 4.5 | -7.4 |
| Watonga | 1,462 | 1,496 | -2.5 | -8.8 |
| Weatherford | 5,167 | 5,115 | 6.7 | 2.4 |
| Wewoka | 1,020 | 1,028 | -6.5 | 7.1 |
| Woodward | 10,547 | 10,695 | 6.8 | 7.9 |
| **Total** | 954,688 | 985,891 | 3.9 | -3.4 |

## RETAIL TRADE IN METRO AREAS AND STATE
($000)

| | | | | | Percentage Change | | |
|---|---|---|---|---|---|---|---|
| | 4 Mos. '88 | 4 Mos. '87 | Apr. '88 | | 4 Mos. '88/'87 | Apr./Mar. '88 | |
| Retail Trade | Adjusted | Adjusted | Adjusted | Unadjusted | Adjusted | Adjusted | Unadjusted |
| **OKLAHOMA CITY MSA** | | | | | | | |
| Food Group | 747,440 | 732,479 | 180,637 | 188,076 | 2.0 | -3.9 | -1.8 |
| Apparel | 59,932 | 61,145 | 13,780 | 13,971 | -2.0 | -17.0 | -16.8 |
| General Merchandise Group | 249,028 | 234,516 | 57,086 | 51,768 | 6.2 | 1.6 | 0.1 |
| Furniture & Appliances | 74,427 | 86,561 | 17,821 | 18,426 | -14.0 | -3.3 | 13.1 |
| Lumber & Building Materials | 55,705 | 54,836 | 13,783 | 15,762 | 1.6 | 3.2 | 17.7 |
| Auto Dealers | 548,277 | 506,519 | 115,478 | 121,522 | 8.2 | -2.9 | 14.0 |
| Service Stations | 67,580 | 71,285 | 18,044 | 17,562 | -5.2 | 3.7 | 17.5 |
| All Other | 263,148 | 243,346 | 53,064 | 59,979 | 8.1 | -10.2 | 3.9 |
| Total | 2,065,537 | 1,990,687 | 469,693 | 487,066 | 3.8 | -3.8 | 3.9 |
| **TULSA MSA** | | | | | | | |
| Food Group | 435,347 | 439,823 | 109,734 | 112,004 | -1.0 | 0.7 | 1.9 |
| Apparel | 57,878 | 56,336 | 13,320 | 12,550 | 2.7 | -2.9 | -5.5 |
| General Merchandise Group | 220,665 | 188,244 | 48,714 | 48,186 | 17.2 | -14.3 | -12.5 |
| Furniture & Appliances | 51,170 | 46,107 | 12,194 | 12,209 | 11.0 | -21.3 | -18.2 |
| Lumber & Building Materials | 42,774 | 46,913 | 10,592 | 11,704 | -8.8 | 3.8 | 15.8 |
| Auto Dealers | 319,012 | 294,719 | 67,188 | 70,707 | 8.2 | -2.9 | 14.0 |
| Service Stations | 55,521 | 58,560 | 14,824 | 14,428 | -5.2 | 3.7 | 17.5 |
| All Other | 49,166 | 55,535 | 11,777 | 13,500 | -11.5 | -1.3 | 12.8 |
| Total | 1,231,533 | 1,186,237 | 288,343 | 295,288 | 3.8 | -4.1 | 2.0 |
| **ENID MSA** | | | | | | | |
| Food Group | 37,096 | 36,752 | 10,534 | 10,507 | 0.9 | 25.8 | 30.4 |
| Apparel | 5,398 | 6,012 | 1,332 | 1,441 | -10.2 | 2.1 | 11.2 |
| General Merchandise Group | 17,032 | 15,771 | 3,962 | 3,889 | 8.0 | -0.6 | 3.6 |
| Furniture & Appliances | 4,048 | 4,061 | 918 | 926 | -0.3 | -3.7 | -1.1 |
| Lumber & Building Materials | 4,940 | 5,005 | 1,203 | 1,370 | -1.3 | 2.5 | 20.9 |
| Auto Dealers | 31,397 | 29,010 | 6,613 | 6,955 | 8.2 | -2.9 | 14.0 |
| Service Stations | 4,981 | 5,256 | 1,329 | 1,294 | -5.2 | 3.7 | 17.4 |
| All Other | 11,351 | 11,963 | 2,167 | 2,869 | -5.1 | -28.5 | 7.6 |
| Total | 116,243 | 113,830 | 28,058 | 29,251 | 2.1 | 4.2 | 16.8 |
| **LAWTON MSA** | | | | | | | |
| Food Group | 63,162 | 63,226 | 16,408 | 16,773 | -0.1 | 18.9 | 18.7 |
| Apparel | 7,247 | 7,563 | 1,783 | 1,937 | -4.2 | -0.4 | 8.5 |
| General Merchandise Group | 50,178 | 46,041 | 11,737 | 11,825 | 9.0 | -19.5 | -12.6 |
| Furniture & Appliances | 9,479 | 8,936 | 2,399 | 2,320 | 6.1 | 16.2 | 11.5 |
| Lumber & Building Materials | 5,817 | 6,414 | 1,434 | 1,621 | -9.3 | -8.0 | 5.6 |
| Auto Dealers | 41,818 | 38,635 | 8,808 | 9,269 | 8.2 | -2.9 | 14.0 |
| Service Stations | 3,401 | 3,587 | 908 | 883 | -5.2 | 3.7 | 17.4 |
| All Other | 12,983 | 15,355 | 2,524 | 3,078 | -15.4 | -36.6 | -25.3 |
| Total | 194,085 | 189,757 | 46,001 | 47,706 | 2.3 | -3.6 | 3.6 |
| **MUSKOGEE AREA** | | | | | | | |
| Food Group | 42,766 | 45,448 | 11,033 | 11,462 | -5.9 | 6.0 | 12.1 |
| Apparel | 6,621 | 6,558 | 1,721 | 1,898 | 1.0 | 5.6 | 14.0 |
| General Merchandise Group | 15,698 | 12,811 | 3,631 | 3,836 | 22.5 | -9.1 | 0.2 |
| Furniture & Appliances | 3,991 | 4,338 | 851 | 946 | -8.0 | -35.1 | -18.7 |
| Lumber & Building Materials | 1,504 | 1,839 | 393 | 405 | -18.2 | 0.9 | 6.6 |
| Auto Dealers | 26,392 | 24,387 | 5,557 | 5,846 | 8.2 | -2.9 | 14.0 |
| Service Stations | 4,354 | 4,604 | 1,163 | 1,131 | -5.4 | 3.7 | 17.4 |
| All Other | 12,635 | 12,389 | 2,730 | 2,953 | 2.0 | -4.3 | 6.0 |
| Total | 113,961 | 112,374 | 27,079 | 28,477 | 1.4 | -1.3 | 9.0 |
| **STATE**[a] | | | | | | | |
| **Durable Goods** | 1,976,877 | 1,865,978 | 414,903 | 451,318 | 5.9 | -7.9 | 9.7 |
| Auto Dealers | 1,370,569 | 1,266,692 | 288,696 | 303,620 | 8.2 | -2.9 | 14.0 |
| Accessory Dealers | 111,095 | 109,771 | 27,097 | 28,431 | 1.2 | -4.9 | 2.0 |
| Total Automotive | 1,481,664 | 1,376,463 | 315,793 | 332,051 | 7.6 | -3.0 | 12.9 |
| Furniture & Appliances | 116,311 | 112,245 | 25,184 | 24,411 | 3.6 | -23.0 | -24.2 |
| Household Appliances | 82,076 | 75,589 | 18,958 | 18,252 | 8.6 | -4.9 | -1.5 |
| Total Furniture and Appliances | 198,387 | 187,834 | 44,142 | 42,663 | 5.6 | -16.2 | -15.9 |
| Lumber and Building Materials | 175,402 | 186,742 | 42,606 | 49,170 | -6.1 | -0.3 | 16.1 |
| Hardware Stores | 22,668 | 20,927 | 5,609 | 6,450 | 8.3 | 1.1 | 18.6 |
| Total Lumber, Building Materials & Hardware | 198,070 | 207,669 | 48,215 | 55,620 | -4.6 | -0.1 | 16.4 |
| **Nondurable Goods** | 3,508,605 | 3,691,144 | 879,120 | 886,660 | -4.9 | -1.4 | 3.0 |
| Apparel | 208,451 | 208,840 | 46,910 | 47,130 | -0.2 | -15.1 | -14.8 |
| Drug Stores | 163,860 | 182,587 | 39,171 | 40,289 | -10.3 | -3.5 | -1.3 |
| Eating and Drinking Places | 621,109 | 633,429 | 151,466 | 161,116 | -1.9 | -0.6 | 2.6 |
| Food Group | 1,406,745 | 1,533,580 | 358,903 | 360,534 | -8.3 | 0.9 | 3.0 |
| Service Stations | 221,900 | 234,106 | 59,246 | 57,666 | -5.2 | 3.7 | 17.5 |
| General Merchandise Group | 644,062 | 631,640 | 164,756 | 154,352 | 2.0 | -2.6 | 3.7 |
| **Total Retail Trade** | 5,485,482 | 5,557,122 | 1,294,023 | 1,337,978 | -1.3 | -3.6 | 5.2 |

[a] Total includes data for categories not shown in the table.

## ENID AND LAWTON MSAs
## MUSKOGEE MA

| | | | | Percentage Change | |
|---|---|---|---|---|---|
| Category | 4 Mos. '88 | 4 Mos. '87 | Apr. '88 | 4 Mos. '88/'87 | Apr./Mar. '88 |
| **ENID MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 29,819 | 30,531 | 29,775 | -2.3 | -0.3 |
| Total Employment | 28,044 | 27,962 | 28,200 | 0.3 | 0.3 |
| Unemployment Rate (%) | 6.0 | 8.4 | 5.3 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 280 | 248 | 190 | 12.9 | 111.1 |
| Number of Units | 3 | 4 | 2 | -25.0 | 100.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Number of Units | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 219 | 367 | 29 | -40.3 | -77.7 |
| Industrial ($000) | 0 | 444 | 0 | — | 0.0 |
| Institutional ($000) | 300 | 0 | 300 | — | — |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 1,206 | 660 | 0 | 82.7 | 0.0 |
| All Other Nonbuilding ($000) | 62 | 185 | 28 | -66.5 | 7.7 |
| Total Construction ($000) | 2,066 | 1,904 | 547 | 8.5 | 122.5 |
| **LAWTON MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 49,544 | 49,638 | 49,850 | -0.2 | -0.4 |
| Total Employment | 46,800 | 47,069 | 47,125 | -0.6 | 0.0 |
| Unemployment Rate (%) | 5.6 | 5.2 | 5.5 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 6,162 | 7,282 | 1,155 | -15.4 | -42.5 |
| Number of Units | 79 | 111 | 15 | -28.8 | -48.3 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 180 | 400 | 0 | -55.0 | — |
| Number of Units | 6 | 16 | 0 | -62.5 | — |
| Nonresidential | | | | | |
| Commercial ($000) | 574 | 1,079 | 76 | -46.8 | -62.7 |
| Industrial ($000) | 40 | 20 | 40 | 100.0 | — |
| Institutional ($000) | 1,300 | 0 | 300 | — | -70.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 1,848 | 406 | 114 | 355.2 | -93.4 |
| All Other Nonbuilding ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Total Construction ($000) | 10,103 | 9,188 | 1,685 | 10.0 | -66.0 |
| **MUSKOGEE MA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 31,881 | 33,181 | 31,825 | -3.9 | -0.4 |
| Total Employment | 28,925 | 30,150 | 29,125 | -4.1 | 0.6 |
| Unemployment Rate (%) | 9.4 | 9.1 | 8.5 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 216 | 885 | 0 | -75.6 | — |
| Number of Units | 2 | 9 | 0 | -77.8 | — |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 75 | 0 | — | 0.0 |
| Number of Units | 0 | 2 | 0 | — | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 400 | 6,645 | 0 | -94.0 | — |
| Industrial ($000) | 0 | 20 | 0 | — | 0.0 |
| Institutional ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 577 | 385 | 0 | 50.0 | 0.0 |
| All Other Nonbuilding ($000) | 5 | 0 | 0 | — | — |
| Total Construction ($000) | 1,197 | 8,010 | 0 | -85.1 | — |

Note: Includes revisions.

Sources for all tables: Local utilities companies; 10th Federal Reserve District Member Banks; Federal Home Loan Bank of Topeka; Oklahoma Employment Security Commission; United States Department of Commerce, Construction Statistics Division; Oklahoma Department of Transportation, *Progressive Report of the Transportation Director;* Center for Economic and Management Research, College of Business Administration, The University of Oklahoma. The data for all tables were compiled by Marjorie E. Earley, Statistician for CEMR and Brian M. Hickey, Research Assistant.

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## OKLAHOMA CITY AND TULSA MSAs

| Category | 4 Mos. '88 | 4 Mos. '87 | Apr. '88 | Percentage Change<br>4 Mos. '88/'87 | Percentage Change<br>Apr./Mar. '88 |
|---|---|---|---|---|---|
| **OKLAHOMA CITY MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 497,050 | 508,775 | 496,200 | -2.3 | -0.5 |
| Total Employment | 468,875 | 474,850 | 471,800 | -1.3 | 0.3 |
| Unemployment Rate (%) | 5.7 | 6.7 | 4.9 | — | — |
| **Mortgage Loans Closed ($000,000)**[a] | NA | NA | NA | — | — |
| **Bank Deposits ($000,000)**[b] | | | | | |
| Demand Deposits | 801 | 931 | 784 | -14.0 | 2.7 |
| Time and Savings Deposits | 1,098 | 1,869 | 1,113 | -41.3 | 0.8 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 38,147 | 45,155 | 10,196 | -15.5 | -28.7 |
| Number of Units | 541 | 747 | 151 | -27.6 | -20.1 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 125 | 915 | 25 | -86.3 | — |
| Number of Units | 8 | 44 | 2 | -81.9 | — |
| Nonresidential | | | | | |
| Commercial ($000) | 15,170 | 31,712 | 3,288 | -52.2 | -15.6 |
| Industrial ($000) | 2,716 | 726 | 0 | 274.1 | 0.0 |
| Institutional ($000) | 5,928 | 2,687 | 1,230 | 120.6 | -26.7 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 35,272 | 23,444 | 108 | 50.4 | -98.0 |
| All Other Nonbuilding ($000) | 179 | 1,281 | 41 | -86.0 | 57.7 |
| Total Construction ($000) | 97,537 | 105,920 | 14,888 | -7.9 | -41.2 |
| **General Business Index** | 90.6 | 86.8 | 89.8 | 4.4 | 1.6 |
| **TULSA MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 338,750 | 349,975 | 337,000 | -3.2 | -0.9 |
| Total Employment | 313,000 | 317,425 | 314,000 | -1.4 | 0.0 |
| Unemployment Rate (%) | 7.6 | 9.3 | 6.8 | — | — |
| **Mortgage Loans Closed ($000,000)**[a] | NA | NA | NA | — | — |
| **Bank Deposits ($000,000)**[b] | | | | | |
| Demand Deposits | 892 | 872 | 887 | 2.3 | 2.5 |
| Time and Savings Deposits | 2,177 | 2,398 | 2,175 | -9.2 | 0.6 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 34,801 | 42,789 | 9,670 | -18.7 | -12.0 |
| Number of Units | 450 | 601 | 124 | -25.1 | -8.8 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 1,238 | 9,861 | 0 | -87.4 | — |
| Number of Units | 54 | 436 | 0 | -87.6 | — |
| Nonresidential | | | | | |
| Commercial ($000) | 7,951 | 9,203 | 4,794 | -13.6 | 160.1 |
| Industrial ($000) | 4,631 | 1,872 | 417 | 147.4 | — |
| Institutional ($000) | 1,249 | 4,053 | 499 | -69.2 | 232.7 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 14,475 | 16,577 | 1,439 | -12.7 | -76.9 |
| All Other Nonbuilding ($000) | 1,201 | 1,295 | 350 | -7.3 | -42.0 |
| Total Construction ($000) | 65,545 | 85,651 | 17,169 | -23.5 | -17.9 |
| **General Business Index** | 86.6 | 87.6 | 86.3 | -1.2 | 0.5 |

Note: Includes revisions.
[a] By Savings and Loan Associations.
NA = Not Available.
[b] Total deposits of large commercial banks.

## CONSTRUCTION, STATE

| Category | 4 Mos. '88 | 4 Mos. '87 | Apr. '88 | Percentage Change<br>4 Mos. '88/'87 | Percentage Change<br>Apr./Mar. '88 |
|---|---|---|---|---|---|
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 86,335 | 104,118 | 22,784 | -17.1 | -24.3 |
| Number of Units | 1,165 | 1,575 | 312 | -26.0 | -19.8 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 2,414 | 11,364 | 605 | -78.8 | -50.2 |
| Number of Units | 144 | 500 | 55 | -71.2 | -16.7 |
| Nonresidential | | | | | |
| Commercial ($000) | 28,738 | 55,804 | 9,023 | -48.5 | 6.0 |
| Industrial ($000) | 11,098 | 3,227 | 646 | 243.9 | E |
| Institutional ($000) | 11,120 | 11,493 | 2,790 | -3.2 | -29.3 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 102,145 | 79,237 | 17,363 | 28.9 | -28.5 |
| All Other Nonbuilding ($000) | 1,525 | 2,861 | 432 | -46.7 | -36.5 |
| Total Construction ($000) | 243,375 | 268,104 | 53,643 | -9.2 | -22.1 |

Note: Includes revisions.
E = Exceeds 600 percent.

8/16/88 U8130-1

# OKLAHOMA BUSINESS BULLETIN

CENTER FOR ECONOMIC AND MANAGEMENT RESEARCH
COLLEGE OF BUSINESS ADMINISTRATION
THE UNIVERSITY OF OKLAHOMA

CONGRESSIONAL INFO. SERVICE/SRI
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ISSN 0030-1671

August 1988

VOL. 56, ISSUE 8

## SUMMARY OF INDICATORS

| Category | 5 Mos. '88 | 5 Mos. '87 | May '88 | Percentage Change<br>5 Mos. '88/'87 | Percentage Change<br>May/Apr. '88/'87 |
|---|---|---|---|---|---|
| **Personal Income (Monthly Average)** | | | | | |
| Unadjusted ($000,000) | 3,556 | 3,396 | 3,586 | 4.7 | 0.4 |
| Adjusted for CPI ($000,000) | 3,050 | 3,029 | 3,052 | 0.7 | 0.0 |
| **Crude Oil Production (000 bbl)**[a] | 43,947 | 45,271 | 10,718 | -2.9 | -4.4 |
| **Natural Gas Production (000 mcf)**[a] | 663,663 | 691,288 | 140,898 | -4.0 | -17.8 |
| **Industrial Power Sales (000,000 Kwh)**[b] | 3,391 | 3,263 | 697 | 3.9 | 3.9 |
| **Total Bank Deposits (Monthly Average) ($000,000)**[c] | | | | | |
| Demand | 7,565 | 7,477 | 7,525 | 1.2 | -1.2 |
| Savings | 24,566 | 25,688 | 24,479 | -4.4 | -0.1 |
| **Savings and Loan Associations ($000,000)** | | | | | |
| Assets | 10,320 | 9,964 | 10,464 | 3.6 | 0.1 |
| New Mortgage Loans Closed | 242 | 446 | 59 | -45.8 | 11.5 |
| **Employment**[d] | | | | | |
| Total Labor Force (000) | 1,525.4 | 1,565.8 | 1,523.1 | -2.6 | -0.3 |
| Total Employment (000) | 1,422.5 | 1,441.6 | 1,430.9 | -1.3 | -0.1 |
| Unemployment Rate (%) | 6.8 | 8.3 | 6.1 | — | — |
| **General Business Index** | NA | NA | NA | — | — |

Note: Includes revisions.
NA = Not Available

[a] **4 months and April data.** Natural gas includes casinghead gas.

[b] Sales of larger privately owned utility companies.

[c] Total deposits of all depository institutions.

[d] Civilian Labor Force.

## RETAIL TRADE IN SELECTED CITIES
($000)

| City | May '88<br>Adjusted | May '88<br>Unadjusted | Adjusted<br>'88/'87<br>5 Mos. | Adjusted<br>1988<br>May/Apr. |
|---|---|---|---|---|
| Ada | 12,827 | 13,863 | -1.5 | 1.5 |
| Altus | 10,886 | 11,796 | 1.1 | -2.5 |
| Alva | 3,576 | 3,977 | 2.9 | 4.1 |
| Anadarko | 4,775 | 5,264 | 7.8 | 7.5 |
| Ardmore | 18,130 | 19,943 | 4.9 | 4.6 |
| Bartlesville | 18,498 | 19,473 | 0.7 | 5.6 |
| Blackwell | 2,906 | 3,171 | 18.1 | -2.3 |
| Broken Arrow | 17,861 | 20,424 | 8.4 | 7.0 |
| Chickasha | 8,716 | 9,740 | 4.4 | 8.2 |
| Clinton | 5,536 | 6,388 | 7.0 | 0.3 |
| Cushing | 5,373 | 5,908 | 2.6 | 1.1 |
| Del City | 10,243 | 11,949 | -5.7 | 6.3 |
| Duncan | 14,931 | 16,925 | 14.5 | 6.3 |
| Durant | 9,957 | 10,556 | 4.5 | 13.4 |
| Edmond | 23,051 | 25,070 | 15.9 | 6.6 |
| Elk City | 6,715 | 7,550 | 6.7 | -0.5 |
| El Reno | 7,182 | 8,113 | 3.6 | 2.4 |
| Guthrie | 4,901 | 5,441 | 4.9 | 6.4 |
| Guymon | 3,905 | 4,137 | 1.4 | -11.0 |
| Henryetta | 4,721 | 5,260 | 9.9 | 7.0 |
| Hobart | 1,955 | 2,153 | 0.8 | -6.1 |
| Holdenville | 2,520 | 2,830 | 2.1 | 0.8 |
| Hugo | 2,641 | 2,939 | 6.7 | 12.4 |
| Idabel | 3,539 | 3,855 | -1.9 | -0.0 |
| Lawton | 44,240 | 49,231 | 3.1 | 0.2 |
| McAlester | 9,348 | 10,295 | 7.4 | 1.0 |
| Miami | 10,450 | 11,278 | 3.2 | 1.3 |
| Midwest City | 34,480 | 37,329 | 6.1 | 7.7 |
| Moore | 12,553 | 13,001 | 7.9 | 7.1 |
| Muskogee | 26,018 | 28,870 | 3.4 | 0.6 |
| Norman | 57,508 | 63,548 | 7.6 | 7.0 |
| Oklahoma City | 254,234 | 278,612 | 2.0 | 10.2 |
| Okmulgee | 4,928 | 5,401 | 0.6 | 1.3 |
| Pauls Valley | 4,165 | 4,356 | 13.2 | 8.7 |
| Pawhuska | 1,595 | 1,731 | 0.0 | -1.8 |
| Ponca City | 15,099 | 15,991 | 10.9 | -3.5 |
| Poteau | 4,475 | 4,897 | 6.3 | 7.1 |
| Sand Springs | 7,927 | 8,849 | 2.9 | 2.0 |
| Sapulpa | 11,858 | 13,265 | 3.4 | 1.8 |
| Seminole | 5,566 | 5,968 | 2.0 | 2.5 |
| Shawnee | 22,880 | 25,321 | 14.2 | 5.7 |
| Stillwater | 22,792 | [illegible],609 | 7.4 | 0.5 |
| Tahlequah | 7,018 | 7,749 | -0.7 | 1.0 |
| Tulsa | 229,359 | 244,712 | 5.1 | 6.2 |
| Watonga | 1,650 | 1,777 | -1.6 | 13.1 |
| Weatherford | 5,013 | 4,976 | 5.1 | -2.5 |
| Wewoka | 1,084 | 1,214 | -4.0 | 5.2 |
| Woodward | 10,259 | 11,126 | 6.0 | -2.0 |
| **Total** | 1,009,844 | 1,099,831 | 4.7 | 5.8 |

## RETAIL TRADE IN METRO AREAS AND STATE
($000)

| | | | | | Percentage Change | | |
|---|---|---|---|---|---|---|---|
| | 5 Mos. '88 | 5 Mos. '87 | May '88 | | 5 Mos. '88/'87 | May/Apr. '88 | |
| Retail Trade | Adjusted | Adjusted | Adjusted | Unadjusted | Adjusted | Adjusted | Unadjusted |
| **OKLAHOMA CITY MSA** | | | | | | | |
| Food Group | 933,575 | 923,684 | 185,732 | 198,213 | 1.1 | 2.6 | 5.4 |
| Apparel | 73,723 | 75,906 | 13,745 | 12,595 | -2.9 | -0.8 | -9.8 |
| General Merchandise Group | 310,921 | 289,039 | 61,589 | 62,013 | 7.6 | 8.0 | 19.8 |
| Furniture & Appliances | 93,826 | 108,340 | 19,237 | 19,167 | -13.4 | 7.6 | 4.0 |
| Lumber & Building Materials | 72,644 | 70,167 | 15,464 | 18,274 | 3.5 | 11.1 | 15.9 |
| Auto Dealers | 679,366 | 603,891 | 129,884 | 162,054 | 12.5 | 11.5 | 33.4 |
| Service Stations | 85,230 | 88,926 | 17,646 | 17,612 | -4.2 | -2.1 | 0.3 |
| All Other | 321,275 | 298,968 | 60,943 | 66,568 | 7.5 | 22.0 | 11.0 |
| Total | 2,570,560 | 2,458,921 | 504,240 | 556,496 | 4.5 | 7.7 | 14.3 |
| **TULSA MSA** | | | | | | | |
| Food Group | 543,504 | 553,107 | 108,952 | 113,762 | -1.7 | -0.8 | 1.6 |
| Apparel | 69,721 | 69,136 | 11,949 | 11,163 | 0.8 | -10.0 | -11.1 |
| General Merchandise Group | 273,513 | 236,746 | 53,276 | 53,804 | 15.5 | 9.6 | 11.7 |
| Furniture & Appliances | 64,387 | 58,001 | 13,374 | 12,341 | 11.0 | 9.0 | 1.1 |
| Lumber & Building Materials | 54,631 | 58,259 | 11,624 | 13,144 | -6.2 | 8.3 | 12.3 |
| Auto Dealers | 395,284 | 351,373 | 75,570 | 94,290 | 12.5 | 11.7 | 33.4 |
| Service Stations | 70,023 | 73,052 | 14,498 | 14,470 | -4.1 | -2.1 | 0.3 |
| All Other | 62,070 | 68,253 | 11,345 | 14,093 | -9.1 | -3.7 | 4.4 |
| Total | 1,553,133 | 1,467,927 | 300,588 | 327,067 | 4.4 | 4.0 | 10.8 |
| **ENID MSA** | | | | | | | |
| Food Group | 44,927 | 46,590 | 7,973 | 8,394 | -3.6 | -24.5 | -20.1 |
| Apparel | 6,716 | 7,541 | 1,316 | 1,318 | -10.9 | -1.3 | -8.5 |
| General Merchandise Group | 21,073 | 19,788 | 4,030 | 4,243 | 6.5 | 1.3 | 9.1 |
| Furniture & Appliances | 5,080 | 4,983 | 1,003 | 1,112 | 1.9 | 7.5 | 20.1 |
| Lumber & Building Materials | 6,512 | 6,314 | 1,515 | 1,866 | 3.1 | 22.2 | 36.2 |
| Auto Dealers | 38,883 | 34,561 | 7,434 | 9,275 | 12.5 | 11.7 | 33.4 |
| Service Stations | 6,281 | 6,556 | 1,300 | 1,298 | -4.2 | -2.1 | 0.3 |
| All Other | 14,372 | 14,904 | 3,120 | 3,311 | -3.6 | 56.8 | 15.4 |
| Total | 143,844 | 141,237 | 27,691 | 30,817 | 1.8 | -1.2 | 5.4 |
| **LAWTON MSA** | | | | | | | |
| Food Group | 77,846 | 79,231 | 14,875 | 16,204 | -1.7 | -8.6 | -3.4 |
| Apparel | 9,032 | 9,297 | 1,792 | 1,740 | -2.9 | 0.6 | -10.2 |
| General Merchandise Group | 62,075 | 56,849 | 11,855 | 12,532 | 9.2 | 0.9 | 6.0 |
| Furniture & Appliances | 11,818 | 11,322 | 2,352 | 2,260 | 4.4 | -1.6 | -2.6 |
| Lumber & Building Materials | 7,406 | 8,038 | 1,575 | 1,818 | -7.9 | 8.8 | 12.2 |
| Auto Dealers | 51,817 | 46,062 | 9,906 | 12,360 | 12.5 | 11.7 | 33.3 |
| Service Stations | 4,289 | 4,475 | 888 | 886 | -4.2 | -2.1 | 0.3 |
| All Other | 16,325 | 18,424 | 3,243 | 3,920 | -11.4 | 22.0 | 27.4 |
| Total | 240,608 | 233,698 | 46,486 | 51,720 | 3.0 | 0.9 | 8.4 |
| **MUSKOGEE AREA** | | | | | | | |
| Food Group | 53,000 | 56,248 | 10,325 | 10,969 | -5.8 | -6.1 | -4.3 |
| Apparel | 8,520 | 8,209 | 1,831 | 1,767 | 3.8 | 2.4 | -6.9 |
| General Merchandise Group | 19,593 | 16,099 | 3,933 | 3,907 | 21.7 | 8.4 | 1.9 |
| Furniture & Appliances | 4,931 | 5,399 | 925 | 940 | -8.7 | 8.3 | -0.6 |
| Lumber & Building Materials | 1,874 | 2,240 | 376 | 406 | -16.3 | -3.6 | 0.2 |
| Auto Dealers | 32,682 | 29,065 | 6,236 | 7,796 | 12.4 | 11.6 | 33.4 |
| Service Stations | 5,491 | 5,743 | 1,136 | 1,134 | -4.4 | -2.2 | 0.3 |
| All Other | 15,229 | 15,173 | 2,668 | 3,012 | 0.4 | 0.8 | 2.0 |
| Total | 141,320 | 138,176 | 27,430 | 29,931 | 2.3 | 1.4 | 5.1 |
| **STATE**[a] | | | | | | | |
| **Durable Goods** | 2,460,315 | 2,255,318 | 481,758 | 569,168 | 9.1 | 16.3 | 26.1 |
| Auto Dealers | 1,697,355 | 1,509,044 | 324,512 | 404,889 | 12.5 | 11.7 | 33.4 |
| Accessory Dealers | 137,871 | 136,404 | 26,959 | 29,588 | 1.1 | -0.2 | 4.1 |
| Total Automotive | 1,835,226 | 1,645,448 | 351,471 | 434,477 | 11.5 | 10.7 | 30.8 |
| Furniture & Appliances | 143,308 | 138,932 | 27,202 | 27,445 | 3.1 | 8.3 | 12.4 |
| Household Appliances | 100,508 | 94,447 | 18,713 | 18,391 | 6.4 | -0.5 | 0.8 |
| Total Furniture and Appliances | 243,816 | 233,379 | 45,915 | 45,836 | 4.5 | 4.6 | 7.4 |
| Lumber and Building Materials | 226,346 | 233,757 | 49,594 | 56,639 | -3.2 | 13.4 | 15.2 |
| Hardware Stores | 28,205 | 26,138 | 5,596 | 6,431 | 7.9 | 0.0 | -0.3 |
| Total Lumber, Building Materials & Hardware | 254,551 | 259,895 | 55,190 | 63,070 | -2.1 | 11.9 | 13.4 |
| **Nondurable Goods** | 4,400,841 | 4,615,102 | 886,974 | 937,836 | -4.6 | 0.7 | 5.8 |
| Apparel | 256,562 | 260,942 | 48,377 | 45,636 | -1.7 | 3.4 | -3.2 |
| Drug Stores | 204,607 | 227,603 | 40,505 | 41,240 | -10.1 | 1.7 | 2.4 |
| Eating and Drinking Places | 781,358 | 797,259 | 157,341 | 173,393 | -2.0 | 3.3 | 7.6 |
| Food Group | 1,771,233 | 1,921,735 | 360,766 | 383,067 | -7.8 | 0.0 | 6.2 |
| Service Stations | 279,861 | 292,028 | 57,947 | 57,832 | -4.2 | -2.1 | 0.3 |
| General Merchandise Group | 812,007 | 791,688 | 167,983 | 166,793 | 2.6 | 1.8 | 8.1 |
| **Total Retail Trade** | 6,861,156 | 6,870,420 | 1,368,732 | 1,507,004 | -0.1 | 5.7 | 12.6 |

[a] Total includes data for categories not shown in the table.

## ENID AND LAWTON MSAs
## MUSKOGEE MA

| Category | 5 Mos. '88 | 5 Mos. '87 | May '88 | Percentage Change | |
|---|---|---|---|---|---|
| | | | | 5 Mos. '88/'87 | May/Apr. '88 |
| **ENID MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 29,770 | 30,525 | 29,625 | -2.5 | -0.3 |
| Total Employment | 28,035 | 28,025 | 28,040 | 0.0 | -0.4 |
| Unemployment Rate (%) | 5.8 | 8.2 | 5.3 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 355 | 373 | 75 | -4.9 | -60.5 |
| Number of Units | 4 | 5 | 1 | -20.0 | -50.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Number of Units | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 303 | 367 | 85 | -17.4 | 195.7 |
| Industrial ($000) | 0 | 1,194 | 0 | — | 0.0 |
| Institutional ($000) | 300 | 0 | 0 | — | — |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 1,697 | 660 | 491 | 157.2 | — |
| All Other Nonbuilding ($000) | 121 | 185 | 59 | -34.8 | 109.3 |
| Total Construction ($000) | 2,776 | 2,779 | 710 | -0.1 | 29.8 |
| **LAWTON MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 49,665 | 49,785 | 50,150 | -0.2 | 0.6 |
| Total Employment | 46,940 | 47,425 | 47,525 | -0.6 | 0.9 |
| Unemployment Rate (%) | 5.5 | 5.1 | 5.2 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 7,139 | 9,660 | 977 | -26.1 | -15.4 |
| Number of Units | 92 | 150 | 13 | -38.7 | -13.3 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 180 | 400 | 0 | -55.0 | 0.0 |
| Number of Units | 6 | 16 | 0 | -62.5 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 916 | 1,623 | 342 | -43.6 | 349.7 |
| Industrial ($000) | 40 | 20 | 0 | 100.0 | — |
| Institutional ($000) | 1,300 | 0 | 0 | — | — |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 1,848 | 406 | 0 | 354.7 | — |
| All Other Nonbuilding ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Total Construction ($000) | 11,422 | 12,109 | 1,319 | -5.7 | -21.7 |
| **MUSKOGEE MA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 31,860 | 33,165 | 31,725 | -3.9 | -0.5 |
| Total Employment | 28,930 | 30,165 | 28,978 | -4.1 | -0.4 |
| Unemployment Rate (%) | 9.3 | 9.1 | 8.7 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 216 | 885 | 0 | -75.6 | 0.0 |
| Number of Units | 2 | 9 | 0 | -77.8 | 0.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 75 | 0 | — | 0.0 |
| Number of Units | 0 | 2 | 0 | — | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 400 | 6,645 | 0 | -94.0 | 0.0 |
| Industrial ($000) | 0 | 20 | 0 | — | 0.0 |
| Institutional ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 582 | 385 | 5 | 50.9 | — |
| All Other Nonbuilding ($000) | 5 | 0 | 0 | — | 0.0 |
| Total Construction ($000) | 1,202 | 8,010 | 5 | -85.0 | — |

Note: Includes revisions.

Sources for all tables: Local utilities companies; 10th Federal Reserve District Member Banks; Federal Home Loan Bank of Topeka; Oklahoma Employment Security Commission; United States Department of Commerce, Construction Statistics Division; Oklahoma Department of Transportation, *Progressive Report of the Transportation Director;* Center for Economic and Management Research, College of Business Administration, The University of Oklahoma. The data for all tables were compiled by Marjorie E. Earley, Statistician for CEMR and Brian M. Hickey, Research Assistant.

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**University of Oklahoma**
**Norman, Oklahoma 73069**

## OKLAHOMA CITY AND TULSA MSAs

| Category | 5 Mos. '88 | 5 Mos. '87 | May '88 | Percentage Change | |
|---|---|---|---|---|---|
| | | | | 5 Mos. '88/'87 | May/Apr '88 |
| **OKLAHOMA CITY MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 497,520 | 509,580 | 498,300 | -2.4 | 0.2 |
| Total Employment | 469,880 | 476,120 | 473,800 | -1.3 | 0.4 |
| Unemployment Rate (%) | 5.6 | 6.6 | 4.9 | — | — |
| **Bank Deposits ($000,000)[a]** | | | | | |
| Demand Deposits | 798 | 922 | 784 | -13.4 | -0.1 |
| Time and Savings Deposits | 1,101 | 1,835 | 1,112 | -40.0 | -0.1 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 45,952 | 55,114 | 8,041 | -16.6 | -20.1 |
| Number of Units | 655 | 908 | 125 | -27.9 | -12.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 125 | 915 | 0 | -86.3 | — |
| Number of Units | 8 | 44 | 0 | -81.8 | — |
| Nonresidential | | | | | |
| Commercial ($000) | 22,775 | 35,088 | 5,231 | -35.1 | 75.8 |
| Industrial ($000) | 3,609 | 1,532 | 42 | 135.6 | -95.1 |
| Institutional ($000) | 7,861 | 3,123 | 1,905 | 151.7 | 54.9 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 35,918 | 23,661 | 646 | 51.8 | 498.1 |
| All Other Nonbuilding ($000) | 574 | 1,822 | 100 | -68.5 | -46.9 |
| Total Construction ($000) | 116,815 | 121,254 | 15,965 | -3.7 | 3.4 |
| **General Business Index** | NA | NA | NA | — | — |
| **TULSA MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 338,900 | 349,920 | 338,200 | -3.1 | -0.1 |
| Total Employment | 313,560 | 317,800 | 315,000 | -1.3 | 0.1 |
| Unemployment Rate (%) | 7.5 | 9.2 | 6.8 | — | — |
| **Bank Deposits ($000,000)[a]** | | | | | |
| Demand Deposits | 890 | 865 | 882 | 2.9 | -0.6 |
| Time and Savings Deposits | 2,165 | 2,374 | 2,119 | -8.8 | -2.6 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 45,017 | 52,854 | 10,217 | -14.8 | 5.6 |
| Number of Units | 584 | 744 | 134 | -21.5 | 8.1 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 1,298 | 9,862 | 60 | -86.8 | — |
| Number of Units | 56 | 436 | 2 | -87.2 | — |
| Nonresidential | | | | | |
| Commercial ($000) | 10,338 | 10,993 | 2,387 | -6.0 | -50.2 |
| Industrial ($000) | 9,559 | 1,970 | 4,928 | 385.2 | E |
| Institutional ($000) | 1,549 | 9,703 | 300 | -84.0 | -39.9 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 14,954 | 16,577 | 479 | -9.8 | -66.7 |
| All Other Nonbuilding ($000) | 1,707 | 1,846 | 506 | -7.5 | 44.8 |
| Total Construction ($000) | 84,422 | 103,805 | 18,877 | -18.7 | 9.9 |
| **General Business Index** | NA | NA | NA | — | — |

Note: Includes revisions. NA = Not Available. E = Exceeds 600 percent.

[a] Total deposits of large commercial banks.

## CONSTRUCTION, STATE

| Category | 5 Mos. '88 | 5 Mos. '87 | May '88 | Percentage Change | |
|---|---|---|---|---|---|
| | | | | 5 Mos. '88/'87 | May/Apr. '88 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 107,508 | 128,174 | 21,409 | -16.1 | -5.5 |
| Number of Units | 1,456 | 1,937 | 302 | -24.8 | -0.3 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 2,474 | 11,364 | 60 | -78.2 | -90.1 |
| Number of Units | 146 | 500 | 2 | -70.8 | -96.4 |
| Nonresidential | | | | | |
| Commercial ($000) | 39,779 | 61,924 | 8,667 | -35.8 | -0.5 |
| Industrial ($000) | 17,411 | 5,080 | 5,463 | 242.7 | 265.1 |
| Institutional ($000) | 14,088 | 17,682 | 2,940 | -20.3 | 5.4 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 124,713 | 86,697 | 22,568 | 43.8 | 30.0 |
| All Other Nonbuilding ($000) | 2,508 | 3,997 | 688 | -37.2 | 18.6 |
| Total Construction ($000) | 308,481 | 314,919 | 61,794 | -2.0 | 14.0 |

Note: Includes revisions.

9/20/88 U8 130-1 A

# OKLAHOMA BUSINESS BULLETIN

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George W. England
Director

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## SUMMARY OF INDICATORS

| Category | 6 Mos. '88 | 6 Mos. '87 | June '88 | Percentage Change<br>6 Mos. '88/'87 | Percentage Change<br>June/May '88 |
|---|---|---|---|---|---|
| **Personal Income (Monthly Average)** | | | | | |
| Unadjusted ($000,000) | 3,565 | 3,395 | 3,611 | 5.0 | 0.7 |
| Adjusted for CPI ($000,000) | 3,052 | 3,020 | 3,060 | 1.1 | 0.3 |
| **Crude Oil Production (000 bbl)[a]** | 50,825 | 51,623 | 10,274 | -1.5 | 2.6 |
| Natural Gas production (000 mcf)[a] | 959,641 | 854,705 | 151,148 | 12.2 | -45.9 |
| **Industrial Power Sales (000,000 Kwh)[b]** | 4,130 | 3,971 | 740 | 4.0 | 6.2 |
| **Total Bank Deposits (Monthly Average) ($000,000)[c]** | | | | | |
| Demand | 7,588 | 7,500 | 7,706 | 1.2 | 2.4 |
| Savings | 24,557 | 25,670 | 24,511 | -4.3 | 0.1 |
| **Savings and Loan Associations ($000,000)** | | | | | |
| Assets | 10,329 | 9,968 | 10,374 | 3.6 | -8.6 |
| Mortgage Loans Closed | 308 | 531 | 66 | -42.0 | 11.9 |
| **General Business Index** | 94.5 | 93.5 | 94.2 | 1.1 | 0.4 |

Note: Includes revisions.

[a] 5 months and May data. Natural gas includes casinghead gas.

[b] Sales of larger privately owned utility companies.

[c] Total deposits of all depository institutions.

## SELECTED ECONOMIC INDICATORS

| Category | 6 Mos. '88 | 6 Mos. '87 | June '88 | Percentage Change<br>6 Mos. '88/'87 | Percentage Change<br>June/May '88 |
|---|---|---|---|---|---|
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 134,334 | 156,727 | 26,826 | -14.3 | 25.3 |
| Number of Units | 1,813 | 2,372 | 357 | -23.6 | 18.2 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 2,664 | 12,502 | 190 | -78.7 | 216.7 |
| Number of Units | 157 | 576 | 11 | -72.7 | 450.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 73,203 | 68,862 | 33,423 | 6.3 | 285.6 |
| Industrial ($000) | 20,838 | 5,185 | 3,427 | 301.9 | -37.3 |
| Institutional ($000) | 21,062 | 18,637 | 6,973 | 13.0 | 137.2 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 149,982 | 106,173 | 25,269 | 41.3 | 12.0 |
| All Other Nonbuilding ($000) | 3,155 | 5,055 | 647 | -37.6 | -5.9 |
| Total Construction ($000) | 405,237 | 373,142 | 96,756 | 8.6 | 56.6 |
| **EMPLOYMENT TRENDS** | | | | | |
| Total Labor Force (000)[a] | 1,526.8 | 1,570.6 | 1,527.7 | -2.8 | 0.0 |
| Total Employment (000) | 1,425.0 | 1,446.7 | 1,434.8 | -1.5 | 0.1 |
| Manufacturing (000) | 155.4 | 153.9 | 157.6 | 1.0 | 1.2 |
| Mining (000) | 43.8 | 45.4 | 43.4 | -3.5 | 0.7 |
| Government (000) | 250.1 | 251.0 | 248.2 | -0.4 | -1.8 |
| Contract Construction (000) | 31.3 | 33.5 | 33.2 | -6.6 | 2.5 |
| Services (000) | 233.0 | 229.7 | 239.8 | 1.4 | 1.5 |
| Retail Trade (000) | 203.9 | 209.2 | 207.3 | -2.5 | 0.8 |
| Unemployment Rate (%) | 6.7 | 8.2 | 6.2 | — | — |
| **Average Weekly Hours** | | | | | |
| Manufacturing (Per Worker) | 41.1 | 41.1 | 41.2 | 0.0 | 0.2 |
| **Average Weekly Earnings** | | | | | |
| Manufacturing ($ Per Worker) | 422.72 | 411.32 | 423.95 | 2.8 | -0.1 |
| Contract Construction ($ Per Worker) | 425.57 | 425.56 | 440.30 | 0.0 | -1.4 |
| Retail Trade Excluding Eating and Drinking Places ($ Per Worker) | 189.41 | 191.37 | 194.64 | -1.0 | 1.9 |

Note: Includes revisions in some previous months.

[a] Civilian Labor Force.

## RETAIL TRADE IN METRO AREAS AND STATE
($000)

| | | | | | Percentage Change | | |
|---|---|---|---|---|---|---|---|
| | 6 Mos. '88 | 6 Mos. '87 | June '88 | | 6 Mos. '88/'87 | June/May '88 | |
| Retail Trade | Adjusted | Adjusted | Adjusted | Unadjusted | Adjusted | Adjusted | Unadjusted |
| **OKLAHOMA CITY MSA** | | | | | | | |
| Food | 1,121,354 | 1,109,759 | 187,187 | 197,579 | 1.0 | 0.6 | -0.3 |
| Apparel | 87,028 | 90,750 | 13,359 | 12,196 | -4.1 | -2.7 | -3.2 |
| General Merchandise | 372,550 | 347,725 | 61,825 | 62,838 | 7.1 | -0.3 | 1.3 |
| Furniture | 114,163 | 127,005 | 19,746 | 20,861 | -10.1 | 1.7 | 8.8 |
| Lumber | 88,678 | 84,125 | 15,910 | 18,892 | 5.4 | 1.9 | 3.4 |
| Auto Dealers | 876,620 | 736,639 | 194,687 | 200,267 | 19.0 | 43.2 | 23.6 |
| Service Stations | 102,306 | 101,459 | 17,291 | 18,263 | 0.8 | -1.2 | 3.7 |
| All Other | 381,129 | 354,597 | 61,059 | 66,461 | 7.5 | 0.1 | -0.2 |
| Total | 3,143,828 | 2,952,059 | 571,064 | 597,357 | 6.5 | 11.7 | 7.3 |
| **TULSA MSA** | | | | | | | |
| Food | 655,316 | 661,198 | 111,492 | 117,880 | -0.9 | 2.8 | 3.6 |
| Apparel | 81,468 | 83,104 | 11,865 | 11,035 | -2.0 | -2.1 | -1.1 |
| General Merchandise | 327,108 | 283,848 | 54,009 | 54,579 | 15.2 | 1.3 | 1.4 |
| Furniture | 77,468 | 69,509 | 13,291 | 12,926 | 11.5 | -0.0 | 4.7 |
| Lumber | 66,077 | 70,115 | 11,457 | 13,274 | -5.8 | -2.0 | 1.0 |
| Auto Dealers | 510,053 | 428,611 | 113,275 | 116,524 | 19.0 | 43.2 | 23.6 |
| Service Stations | 84,052 | 83,349 | 14,207 | 15,005 | 0.8 | -1.2 | 3.7 |
| All Other | 76,206 | 81,774 | 13,701 | 14,551 | -6.8 | 12.1 | 3.2 |
| Total | 1,877,748 | 1,761,508 | 343,297 | 355,774 | 6.6 | 12.7 | 8.8 |
| **ENID MSA** | | | | | | | |
| Food | 54,540 | 56,199 | 9,497 | 9,778 | -3.0 | 19.0 | 16.5 |
| Apparel | 8,054 | 9,078 | 1,338 | 1,246 | -11.3 | 1.6 | -5.5 |
| General Merchandise | 25,165 | 23,778 | 4,121 | 4,018 | 5.8 | 1.7 | -5.3 |
| Furniture | 6,399 | 5,880 | 1,309 | 1,257 | 8.8 | 28.0 | 13.0 |
| Lumber | 7,840 | 7,678 | 1,332 | 1,458 | 2.1 | -11.7 | -21.9 |
| Auto Dealers | 50,173 | 42,159 | 11,143 | 11,462 | 19.0 | 43.2 | 23.6 |
| Service Stations | 7,540 | 7,480 | 1,274 | 1,346 | 0.8 | -1.2 | 3.7 |
| All Other | 17,253 | 17,670 | 2,738 | 3,036 | -2.4 | -14.8 | -8.3 |
| Total | 176,964 | 169,922 | 32,752 | 33,601 | 4.1 | 16.3 | 9.0 |
| **LAWTON MSA** | | | | | | | |
| Food | 92,777 | 94,629 | 15,096 | 15,943 | -2.0 | 1.7 | -1.6 |
| Apparel | 10,772 | 11,079 | 1,753 | 1,744 | -2.8 | -1.7 | 0.2 |
| General Merchandise | 73,568 | 67,944 | 11,624 | 11,778 | 8.3 | -2.0 | -6.0 |
| Furniture | 13,967 | 13,388 | 2,228 | 2,145 | 4.3 | -4.3 | -5.1 |
| Lumber | 8,974 | 9,712 | 1,571 | 1,691 | -7.6 | -0.5 | -7.0 |
| Auto Dealers | 66,861 | 56,187 | 14,848 | 15,274 | 19.0 | 43.2 | 23.6 |
| Service Stations | 5,149 | 5,106 | 870 | 919 | 0.8 | -1.1 | 3.7 |
| All Other | 18,960 | 20,940 | 2,754 | 3,934 | -9.5 | -15.3 | 0.4 |
| Total | 291,028 | 278,985 | 50,744 | 53,428 | 4.3 | 8.2 | 3.3 |
| **MUSKOGEE AREA** | | | | | | | |
| Food | 63,186 | 67,135 | 10,276 | 10,950 | -5.9 | -0.4 | -0.2 |
| Apparel | 10,289 | 9,648 | 1,783 | 1,681 | 6.6 | -2.4 | -4.9 |
| General Merchandise | 23,426 | 19,376 | 3,916 | 3,750 | 20.9 | -0.3 | -4.0 |
| Furniture | 5,894 | 6,380 | 970 | 1,006 | -7.6 | 4.0 | 7.0 |
| Lumber | 2,238 | 2,676 | 372 | 442 | -16.4 | -0.3 | 8.9 |
| Auto Dealers | 42,179 | 35,450 | 9,365 | 9,634 | 19.0 | 43.2 | 23.6 |
| Service Stations | 6,589 | 6,549 | 1,113 | 1,176 | 0.6 | -1.2 | 3.7 |
| All Other | 17,879 | 17,805 | 2,610 | 3,306 | 0.4 | -2.8 | 9.8 |
| Total | 171,680 | 165,019 | 30,405 | 31,945 | 4.0 | 9.7 | 6.7 |
| **STATE**[a] | | | | | | | |
| **Durable Goods** | 3,108,413 | 2,733,037 | 642,797 | 670,158 | 13.7 | 30.6 | 17.7 |
| Auto Dealers | 2,190,207 | 1,840,720 | 486,432 | 500,364 | 19.0 | 43.2 | 23.6 |
| Accessory Dealers | 165,462 | 163,122 | 27,574 | 31,026 | 1.4 | 2.4 | 4.9 |
| Total Automotive | 2,355,669 | 2,003,842 | 514,006 | 531,390 | 17.6 | 40.2 | 22.3 |
| Furniture | 171,180 | 164,731 | 28,029 | 28,222 | 3.9 | 3.1 | 2.8 |
| Household Appliances | 118,544 | 111,313 | 18,281 | 19,338 | 6.5 | -1.9 | 5.1 |
| Total Furniture and Appliances | 289,724 | 276,044 | 46,310 | 47,560 | 5.0 | 1.0 | 3.8 |
| Lumber and Building Materials | 276,091 | 280,828 | 49,398 | 56,724 | -1.7 | -1.0 | 0.2 |
| Hardware Stores | 33,733 | 31,285 | 5,577 | 6,467 | 7.8 | -0.3 | 0.6 |
| Total Lumber, Building Materials & Hardware | 309,824 | 312,113 | 54,975 | 63,191 | -0.7 | -0.9 | 0.2 |
| **Nondurable Goods** | 5,277,640 | 5,524,643 | 877,541 | 907,604 | -4.5 | -1.0 | -3.2 |
| Apparel | 303,136 | 311,773 | 46,911 | 43,327 | -2.8 | -2.6 | -5.1 |
| Drug Stores | 247,784 | 271,144 | 42,205 | 41,492 | -8.6 | 3.7 | 0.6 |
| Eating and Drinking Places | 930,250 | 945,020 | 149,909 | 160,701 | -1.6 | -4.5 | -7.3 |
| Food Group | 2,111,666 | 2,321,598 | 349,043 | 372,801 | -9.0 | -2.5 | -2.7 |
| Service Stations | 335,928 | 333,176 | 56,777 | 59,970 | 0.8 | -1.2 | 3.7 |
| General Merchandise Group | 983,128 | 945,734 | 172,683 | 165,409 | 4.0 | 2.8 | -0.8 |
| **Total Retail Trade** | 8,386,053 | 8,257,680 | 1,520,338 | 1,577,762 | 1.6 | 10.3 | 4.7 |

[a] Total includes data for categories not shown in the table.

## RETAIL TRADE IN SELECTED CITIES
($000)

| | | | | | Percentage Change | | |
|---|---|---|---|---|---|---|---|
| | 6 Mos. '88 | 6 Mos. '87 | June '88 | | 6 Mos. '88/'87 | June/May '88 | |
| Retail Trade | Adjusted | Adjusted | Adjusted | Unadjusted | Adjusted | Adjusted | Unadjusted |
| Ada | 79,462 | 78,524 | 14,215 | 15,152 | 1.2 | 9.6 | 9.3 |
| Altus | 71,594 | 69,328 | 13,029 | 13,698 | 3.3 | 19.0 | 16.1 |
| Alva | 22,133 | 21,091 | 3,972 | 4,333 | 4.9 | 8.5 | 9.0 |
| Anadarko | 27,247 | 26,121 | 4,993 | 5,464 | 4.3 | 3.4 | 3.8 |
| Ardmore | 112,630 | 105,426 | 20,090 | 21,083 | 6.8 | 7.8 | 5.7 |
| Bartlesville | 113,290 | 109,887 | 21,071 | 21,537 | 3.1 | 13.5 | 10.6 |
| Blackwell | 20,203 | 16,997 | 3,613 | 3,716 | 18.9 | 26.1 | 17.2 |
| Broken Arrow | 111,523 | 100,506 | 20,905 | 21,957 | 11.0 | 15.8 | 7.5 |
| Chickasha | 54,115 | 50,492 | 10,310 | 10,524 | 7.2 | 17.1 | 8.0 |
| Clinton | 37,680 | 34,095 | 7,306 | 7,689 | 10.5 | 25.8 | 20.4 |
| Cushing | 31,795 | 30,134 | 5,652 | 6,394 | 5.5 | 4.5 | 8.2 |
| Del City | 62,634 | 65,365 | 11,168 | 12,460 | -4.2 | 7.6 | 4.3 |
| Duncan | 88,482 | 74,443 | 17,579 | 17,702 | 18.9 | 16.5 | 4.6 |
| Durant | 62,093 | 58,855 | 11,072 | 11,433 | 5.5 | 10.1 | 8.3 |
| Edmond | 142,183 | 121,724 | 24,989 | 25,941 | 16.8 | 6.7 | 3.5 |
| Elk City | 43,988 | 40,171 | 8,450 | 8,668 | 9.5 | 22.5 | 14.8 |
| El Reno | 44,505 | 41,928 | 8,512 | 8,841 | 6.1 | 17.3 | 9.0 |
| Guthrie | 30,317 | 28,437 | 5,419 | 5,822 | 6.6 | 9.1 | 7.0 |
| Guymon | 25,720 | 25,210 | 4,320 | 4,578 | 2.0 | 11.1 | 10.7 |
| Henryetta | 28,068 | 25,841 | 4,916 | 5,385 | 8.6 | 2.7 | 2.4 |
| Hobart | 13,382 | 12,876 | 2,563 | 2,759 | 3.9 | 33.5 | 28.1 |
| Holdenville | 15,743 | 14,993 | 2,991 | 3,067 | 5.0 | 16.1 | 8.4 |
| Hugo | 16,589 | 15,236 | 3,108 | 3,120 | 8.9 | 14.7 | 6.2 |
| Idabel | 21,422 | 21,345 | 3,842 | 4,045 | 0.4 | 7.3 | 4.9 |
| Lawton | 277,021 | 265,376 | 47,853 | 50,782 | 4.4 | 6.0 | 3.2 |
| McAlester | 59,631 | 54,843 | 10,734 | 11,009 | 8.7 | 14.3 | 6.9 |
| Miami | 66,129 | 62,978 | 12,187 | 12,419 | 5.0 | 16.2 | 10.1 |
| Midwest City | 205,017 | 191,937 | 35,850 | 36,534 | 6.8 | 2.9 | -2.1 |
| Moore | 80,225 | 76,649 | 12,884 | 13,644 | 4.7 | 2.7 | 4.9 |
| Muskogee | 164,375 | 156,241 | 28,098 | 31,144 | 5.2 | 6.0 | 7.9 |
| Norman | 358,293 | 324,447 | 69,156 | 70,128 | 10.4 | 18.9 | 10.4 |
| Oklahoma City | 1,574,205 | 1,511,214 | 290,423 | 304,880 | 4.2 | 12.0 | 9.4 |
| Okmulgee | 30,603 | 29,680 | 5,677 | 5,952 | 3.1 | 14.9 | 10.2 |
| Pauls Valley | 24,496 | 21,410 | 4,347 | 4,564 | 14.4 | 3.3 | 4.8 |
| Pawhuska | 9,694 | 9,537 | 1,621 | 1,697 | 1.6 | 1.6 | -2.0 |
| Ponca City | 96,818 | 86,158 | 17,491 | 18,392 | 12.4 | 18.4 | 15.0 |
| Poteau | 26,991 | 24,582 | 5,273 | 5,388 | 9.8 | 17.4 | 10.0 |
| Sand Springs | 48,788 | 46,784 | 8,535 | 9,053 | 4.3 | 5.5 | 2.3 |
| Sapulpa | 73,458 | 69,361 | 13,492 | 14,217 | 5.9 | 10.8 | 7.2 |
| Seminole | 34,095 | 32,751 | 6,150 | 6,453 | 4.1 | 9.6 | 8.1 |
| Shawnee | 154,562 | 134,605 | 26,784 | 27,275 | 14.8 | 17.1 | 7.7 |
| Stillwater | 144,180 | 133,366 | 24,154 | 24,221 | 8.1 | 5.3 | 2.6 |
| Tahlequah | 44,322 | 43,818 | 8,012 | 8,151 | 1.2 | 13.9 | 5.2 |
| Tulsa | 1,426,644 | 1,334,389 | 259,275 | 266,232 | 6.9 | 11.2 | 8.8 |
| Watonga | 9,844 | 9,957 | 1,705 | 1,866 | -1.1 | 2.3 | 5.0 |
| Weatherford | 32,021 | 29,686 | 5,940 | 6,092 | 7.9 | 18.4 | 22.4 |
| Wewoka | 6,484 | 6,489 | 1,226 | 1,302 | -0.1 | 12.0 | 7.2 |
| Woodward | 66,083 | 61,001 | 12,257 | 12,761 | 8.3 | 18.7 | 14.7 |
| **Total Selected Cities** | 6,290,777 | 5,906,284 | 1,143,209 | 1,189,524 | 6.5 | 11.6 | 8.2 |

Sources for all tables: Local utilities companies; 10th Federal Reserve District Member Banks; Federal Home Loan Bank of Topeka; Oklahoma Employment Security Commission; United States Department of Commerce, Construction Statistics Division; Oklahoma Department of Transportation, *Progressive Report of the Transportation Director;* Center for Economic and Management Research, College of Business Administration, The University of Oklahoma. The data for all tables were compiled by Marjorie E. Earley, Statistician for CEMR and Brian Hickey, Research Assistant.

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**EQUAL OPPORTUNITY STATEMENT**

This institution in compliance with Title VI and VII of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, and other Federal laws and regulations does not discriminate on the basis of race, color, or national origin, sex, age, religion, handicap, or status as a veteran in any of its policies, practices or procedures. This includes but is not limited to admissions, employment, financial aid, and educational services.

## ENID AND LAWTON MSAs

| Category | 6 Mos. '88 | 6 Mos. '87 | June '88 | Percentage Change 6 Mos. '88/'87 | Percentage Change June/May '88 |
|---|---|---|---|---|---|
| **ENID MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 29,788 | 30,621 | 29,875 | -2.7 | 0.8 |
| Total Employment | 28,100 | 28,171 | 28,425 | -0.3 | -2.2 |
| Unemployment Rate (%) | 5.7 | 8.0 | 4.9 | — | — |
| **Industrial Power Sales (000 Kwh)** | 232,936 | 223,396 | 40,384 | 4.3 | -5.8 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 355 | 553 | 0 | -35.9 | — |
| Number of Units | 4 | 7 | 0 | -42.9 | — |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Number of Units | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 337 | 383 | 34 | -12.1 | -60.4 |
| Industrial ($000) | 0 | 1,194 | 0 | — | 0.0 |
| Institutional ($000) | 300 | 0 | 0 | — | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 1,697 | 660 | 0 | 157.2 | — |
| All Other Nonbuilding ($000) | 121 | 239 | 0 | -49.5 | -99.5 |
| Total Construction ($000) | 2,810 | 3,030 | 34 | -7.3 | -95.2 |
| **LAWTON MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 49,767 | 49,908 | 50,275 | -0.3 | 0.2 |
| Total Employment | 47,062 | 47,358 | 47,675 | -0.6 | 0.3 |
| Unemployment Rate (%) | 5.4 | 5.1 | 5.2 | — | — |
| **Industrial Power Sales (000 Kwh)** | 94,954 | 92,612 | 16,963 | 2.5 | 3.1 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 7,973 | 11,160 | 835 | -28.6 | -14.6 |
| Number of Units | 104 | 174 | 12 | -40.2 | -7.7 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 180 | 400 | 0 | -55.0 | 0.0 |
| Number of Units | 6 | 16 | 0 | -62.5 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 2,733 | 1,623 | 1,817 | 68.4 | 431.6 |
| Industrial ($000) | 830 | 20 | 790 | E | — |
| Institutional ($000) | 1,300 | 0 | 0 | — | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 1,848 | 406 | 0 | 354.7 | 0.0 |
| All Other Nonbuilding ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Total Construction ($000) | 14,864 | 13,610 | 3,442 | 9.2 | 161.0 |

Note: Includes revisions.
E = exceeds 600 percent.

## MUSKOGEE MA

| Category | 6 Mos. '88 | 6 Mos. '87 | June '88 | Percentage Change 6 Mos. '88/'87 | Percentage Change June/May '88 |
|---|---|---|---|---|---|
| **Employment (Number)** | | | | | |
| Labor Force | 31,846 | 33,171 | 31,775 | -4.0 | 0.2 |
| Total Employment | 28,958 | 30,175 | 29,100 | -4.0 | 0.4 |
| Unemployment Rate (%) | 9.1 | 9.1 | 8.4 | — | — |
| **Industrial Power Sales (000 Kwh)** | 88,409 | 100,816 | 17,946 | -12.3 | 4.1 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 216 | 885 | 0 | -75.6 | 0.0 |
| Number of Units | 2 | 9 | 0 | -77.8 | 0.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 75 | 0 | — | 0.0 |
| Number of Units | 0 | 2 | 0 | — | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 400 | 6,645 | 0 | -94.0 | 0.0 |
| Industrial ($000) | 0 | 20 | 0 | — | 0.0 |
| Institutional ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 582 | 454 | 0 | 28.0 | — |
| All Other Nonbuilding ($000) | 5 | 0 | 0 | — | 0.0 |
| Total Construction ($000) | 1,201 | 8,079 | 0 | -85.1 | — |

Note: Includes revisions.

## TULSA MSA

| Category | 6 Mos. '88 | 6 Mos. '87 | June '88 | Percentage Change<br>6 Mos. '88/'87 | Percentage Change<br>June/May '88 |
|---|---|---|---|---|---|
| **Employment (Number)** | | | | | |
| Labor Force | 339,767 | 350,900 | 342,500 | -3.2 | 0.9 |
| Total Employment | 314,467 | 319,100 | 319,000 | -1.5 | 1.0 |
| Manufacturing | 47,650 | 47,117 | 48,300 | 1.1 | 0.8 |
| Mining | 14,950 | 15,130 | 15,000 | -1.2 | 2.0 |
| Government | 35,900 | 36,217 | 35,400 | -0.9 | -1.7 |
| Wholesale and Retail Trade | 69,200 | 69,700 | 69,700 | -0.7 | 0.0 |
| Unemployment Rate (%) | 7.4 | 9.1 | 6.9 | — | — |
| **Average Weekly Earnings** | | | | | |
| Manufacturing ($ Per Worker) | 446.61 | 427.54 | 438.07 | 4.5 | -1.1 |
| **Industrial Power Sales (000 Kwh)** | 1,069,259 | 1,012,171 | 156,572 | 5.6 | 11.9 |
| **Mortgage Loans Closed ($000,000)**[a] | 83.3 | 131.1 | 22.0 | -36.5 | 17.6 |
| **Bank Deposits ($000,000)**[b] | | | | | |
| Demand Deposits | 905 | 860 | 981 | 5.2 | 11.2 |
| Time and Savings Deposits | 2,162 | 2,350 | 2,142 | -8.0 | 1.1 |
| **Air Transportation** | | | | | |
| Passengers Enplaning (Number) | 661,873 | 691,432 | 128,082 | -4.3 | 6.4 |
| Passengers Deplaning (Number) | 664,224 | 699,498 | 127,437 | -5.0 | 7.0 |
| Freight (Tons) | 10,444 | 7,091 | 1,908 | 47.3 | 10.6 |
| **Water Transportation** | | | | | |
| Tulsa Port of Catoosa | | | | | |
| Tons In | 286,682 | 268,875 | 22,281 | 6.6 | -61.9 |
| Tons Out | 596,920 | 673,744 | 98,243 | -11.4 | 67.7 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 55,709 | 65,582 | 10,691 | -15.1 | 4.6 |
| Number of Units | 719 | 938 | 135 | -23.3 | 0.7 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 1,298 | 11,000 | 0 | -88.2 | — |
| Number of Units | 56 | 512 | 0 | -89.1 | — |
| Nonresidential | | | | | |
| Commercial ($000) | 32,231 | 12,294 | 21,893 | 162.2 | E |
| Industrial ($000) | 11,405 | 1,970 | 1,846 | 478.9 | -62.5 |
| Institutional ($000) | 7,658 | 9,703 | 6,109 | -21.1 | E |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 20,437 | 16,577 | 5,483 | 23.3 | E |
| All Other Nonbuilding ($000) | 2,255 | 2,426 | 549 | -7.0 | 8.4 |
| Total Construction | 130,993 | 119,551 | 46,571 | 9.6 | 146.7 |
| **General Business Index** | 87.2 | 87.5 | 89.0 | -0.4 | 1.4 |

Note: Includes revisions.

[a] By Savings and Loan Associations, 5 Months and May data.

[b] Deposits of large commercial banks (accounted for 50 percent of all commercial bank deposits as of December 31, 1987).

E = Exceeds 600 percent.

### OKLAHOMA CITY MSA

| Category | 6 Mos. '88 | 6 Mos. '87 | June '88 | Percentage Change<br>6 Mos. '88/'87 | Percentage Change<br>June/May '88 |
|---|---|---|---|---|---|
| **Employment (Number)** | | | | | |
| Labor Force | 498,550 | 510,717 | 502,300 | -2.4 | 0.5 |
| Total Employment | 471,300 | 477,483 | 477,700 | -1.3 | 0.7 |
| Manufacturing | 47,000 | 47,200 | 47,400 | -0.4 | 0.6 |
| Mining | 11,000 | 11,400 | 11,000 | -3.5 | 0.0 |
| Government | 96,000 | 97,200 | 94,600 | -1.2 | -2.5 |
| Wholesale and Retail Trade | 98,600 | 100,400 | 99,400 | -1.8 | -0.3 |
| Unemployment Rate (%) | 5.5 | 6.5 | 4.9 | — | — |
| **Average Weekly Earnings** | | | | | |
| Manufacturing ($ Per Worker) | 473.48 | 448.64 | 482.69 | 5.5 | 0.8 |
| **Industrial Power Sales (000 Kwh)** | 581,170 | 583,922 | 106,163 | -0.5 | 8.7 |
| **Mortgage Loans Closed ($000,000)**[a] | 47.6 | 110.6 | 8.8 | -57.0 | -8.3 |
| **Bank Deposits ($000,000)**[b] | | | | | |
| Demand Deposits | 808 | 919 | 859 | -12.1 | 9.6 |
| Time and Savings Deposits | 1,119 | 1,807 | 1,213 | -38.1 | 9.1 |
| **Air Transportation** | | | | | |
| Passengers Enplaning (Number) | 712,446 | 739,568 | 136,853 | -3.7 | 5.0 |
| Passengers Deplaning (Number) | 718,198 | 748,099 | 137,233 | -4.0 | 4.6 |
| Freight Enplaned (Tons) | 3,297 | 2,927 | 602 | 12.6 | -9.9 |
| Freight Deplaned (Tons) | 4,921 | 4,775 | 739 | 3.1 | -23.8 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 60,067 | 67,689 | 14,115 | -11.3 | 75.5 |
| Number of Units | 845 | 1,103 | 190 | -23.4 | 52.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 205 | 915 | 80 | -77.6 | — |
| Number of Units | 13 | 44 | 5 | -70.5 | — |
| Nonresidential | | | | | |
| Commercial ($000) | 31,627 | 40,135 | 8,852 | -21.2 | 69.2 |
| Industrial ($000) | 4,400 | 1,637 | 791 | 168.8 | E |
| Institutional ($000) | 9,261 | 4,078 | 499 | 127.1 | -7.38 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 39,487 | 29,792 | 3,569 | 32.5 | 452.5 |
| All Other Nonbuilding ($000) | 601 | 2,181 | 27 | -72.4 | -73.5 |
| Total Construction ($000) | 144,747 | 146,427 | 27,932 | -1.1 | 75.0 |
| **General Business Index** | 91.4 | 87.5 | 94.1 | 4.6 | 2.2 |

Note: Includes revisions.

[a] By Savings and Loan Associations. 5 months and May data.

[b] Deposits of large commercial banks (accounted for 36 percent of all commercial bank deposits as of December 31, 1987).

E = Exceeds 600 percent.

## A Note on Adjusted and Unadjusted Retail Sales

Traditionally, the *Oklahoma Business Bulletin* has reported retail sales on a monthly and year to date basis. These monthly data include reports of retail sales volumes for the state as well as the sub-state areas and cities. For the past twenty years, the state and metropolitan area year-to-date data have been reported in the form of "seasonally adjusted" — or more commonly "adjusted" — data while monthly data for all areas (i.e. state, sub-state and cities) have been reported both in the "adjusted" and "unadjusted form" (which is actual sales volumes).

The purpose of seasonally adjusting the data is to eliminate the effects of such variables as length of months, holidays, time periods such as Easter, Mothers' Day and Christmas in which retail buying is particularly large and months during which certain products are normally promoted heavily by special sales. For example, summer months are generally marked by sharp increases in the sales of gasoline due to vacation travel. Also, early fall months are those in which automobile sales rise significantly as dealers reduce their current year inventory through large discounts as well as introduce new models. The elimination of the effects of these and other seasonal variables produces a retail sales level which enables the analyst to determine whether or not sales during the month behaved normally or whether the monthly sales effort varied from the expected monthly pattern. As an example, if actual (or unadjusted) sales of General Merchandise Stores rose 20 percent in December but, after seasonal adjustment declined by five percent, this would indicate that these December sales failed to meet seasonal expectations by about five percent. Conversely, if "adjusted" sales showed no gain or loss, this would indicate that December sales exactly met seasonal expectations. An increase in "adjusted" sales, on the other hand, would indicate a better than expected December sales effort.

For those business operators and managers who prefer to measure actual sales against previous months' sales, the *Bulletin* reports "unadjusted" sales each month along with the relative changes between sales during the recent month and those of the previous month. Year to date sales are reported only in their "adjusted" form since this aggregated "adjusted" total varies only slightly from the "unadjusted" total.

An additional advantage of providing seasonally adjusted data is the fact that both CEMR and the U.S. Department of Commerce use the X-11 program to make seasonal adjustments to retail sales data. This compatibility in adjustment procedures enables economists to compare changes in state retailing data to those for the nation as a whole.

# *Business Highlights*

## NEIL J. DIKEMAN, JR.

OKLAHOMA'S ECONOMY continued to show improvement during the first half of the year in a number of sectors. Possibly the best news thus far this year is the fact that for the first time since 1984, real personal income — that is personal income after adjustment for inflation — has shown an increase of as much as one percent over similar figures for this period last year. The recent gain in personal income came about as a result of monthly increases throughout the six month period which raised the unadjusted income level five percent above that of the same period last year while the level of inflation was increasing at a rate of about four percent.

The year-to-date increase in personal income was paralleled by gains in several other important sectors of Oklahoma's economic structure. Among the more important of these was the three percent rise in retail sales over year ago totals which was due primarily to a 4.7 percent increase in June sales at a time when a sharp decrease was expected. After adjustment for normal seasonal variations, the increase in June amounted to 10.3 percent which off-set the small adjusted increases experienced earlier in the year and raised the seasonally adjusted total for the year, 1.6 percent ahead of the same period last year. The driving force behind this overall six month gain was the 13.7 percent rise in durable goods sales. However, the 4.5 percent decline in non-durable sales during the first half of the year off-set most of this increase.

Among the durable merchandise lines, automobile and accessory sales during June continued the strength shown throughout the year and as a result, sales for the first half of the year exceeded year ago levels by nearly 18 percent. Also, furniture and appliance sales have experienced a relatively good year and are five percent higher than at this time in 1987. Only lumber and building materials, among the durable goods, are lagging behind year ago levels but this decline is less than two percent. Taken as a whole, the durable goods portion of retail markets appears to be healthy and should provide the strength necessary to keep total retail sales ahead of 1987 totals for the remainder of the year.

Non-durable goods sales, on the other hand, remain somewhat erratic and thus are of some concern. Sales of all non-durable lines except drug stores and service stations declined during June. While some decreases were expected in June due to such seasonal factors as a shorter work month and out-of-state vacation expenditures, most of these sales losses were greater than normal thereby causing seasonally adjusted sales of soft goods during the month to be somewhat lower than expected. This situation, in turn, increased the rate of decline in sales of non-durable goods from 1987 levels to the extent that only sales of service station and the general merchandise group exceeded the first half totals of last year. At the current rate of retailing activity, it is very possible that total retail sales by year's end could exceed 1987 by as much as four to five percent primarily due to expected increases in durable goods sales.

Total construction activity during June increased significantly for the second successive month to bring the total for the year to date 8.6 percent above 1987 levels. This latest monthly increase was the result of gains in all types of construction except industrial and other non-building construction activity. The June increases in both single and multi family construction activity were the first since March but, despite their relative significance, were not sufficient to raise the volume of activity in these types of construction to near the 1987 level. Conversely, the June gains in commercial, institutional and street and highway building contributed heavily to maintaining their first half totals at levels which are well above those of last year. The June decline of 37.3 percent in industrial building was not totally unexpected due to the extremely sharp increases experienced in April and May. However, even in the face of this drop, the dollar volume of industrial building during the first half of this year remained more than four times as large as the total for the same period last year. Finally, the near six percent decline in all other non-building construction activity reversed the May increase and left the total dollar volume of activity in this type of construction 37.6 percent behind the total for the first half of 1987. The outlook for construction activity for the remainder of the year is for some seasonal slow downs during the latter portion of the third quarter and all of the fourth quarter so that the total for the year should be about two percent ahead of 1987.

The number of nonagricultural wage and salary workers in Oklahoma turned up slightly in June to a level of 1,434,800 persons which was an increase of nearly four thousand jobs over the May total. This increase reversed the decreases of the two previous months and raised the level for the month to near that of this past April. The overall increase was due to gains in all major employment sectors except government where employment was off the May total by nearly two percent. The encouraging note in this June rise was the fact that the number of jobs in the three high paying industries—manufacturing, mining and construction—each experienced rather significant increases which contributed 3,300 of the 4,000 new hirings during the month.

The June increase, as encouraging as it appears, was not sufficient to boost total employment for the first half of the year up to the level for the same period of 1987 although it did narrow the gap between the two periods to 1.5 percent. The June increases noted in the individual industrial sectors did result in year-to-date gains over year ago totals in manufacturing, mining and services employment but monthly average employment in contract construction, government and retail trade thus far this year remain somewhat below levels of the same period last year.

Other indicators which are showing encouraging signs of growth for the first half of the year are natural gas production which, despite a 46 percent drop in June, posted a gain of 12.2 percent for over the total for the same period last year and assets of thrift institutions which are averaging gains of 3.6 percent over last year's average. These gains were, however, offset by lagging crude oil production — 1.5 percent below the 1987 volume of production — and total deposits in all financial institutions which have fallen 3.1 percent below average monthly deposits for the first half of 1987.

As a result of the various changes noted in the economic indicators for the state, the General Business Index rose for the third consecutive month in June. This latest increase raised the average for the year-to-date 1.1 percent ahead of the average for the same period last year.

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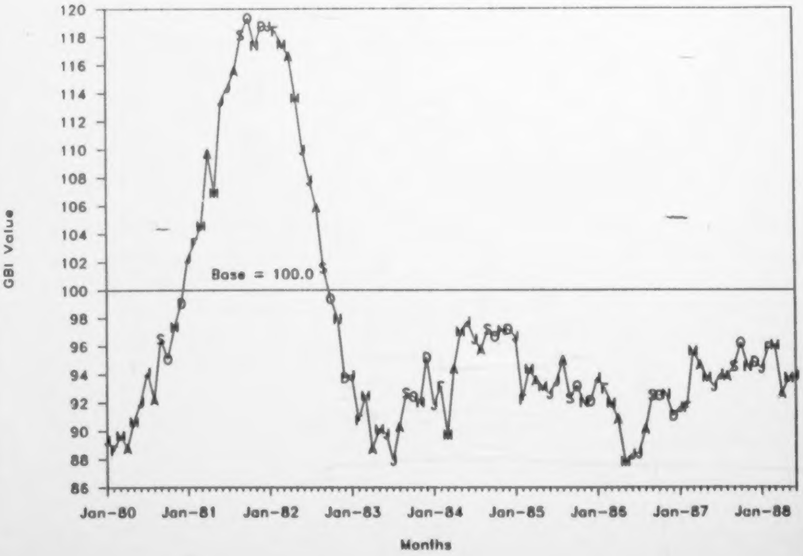
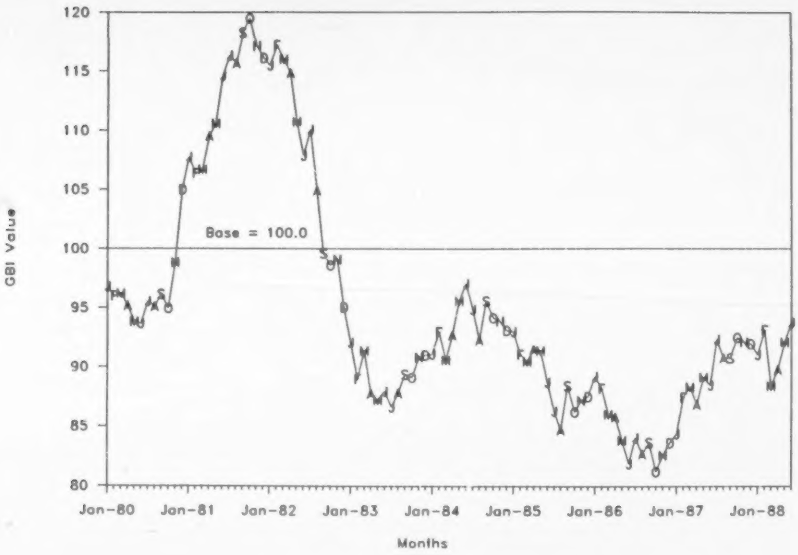
*Neil J. Dikeman, Jr. is Associate Director for the Center for Economic and Management Research.*

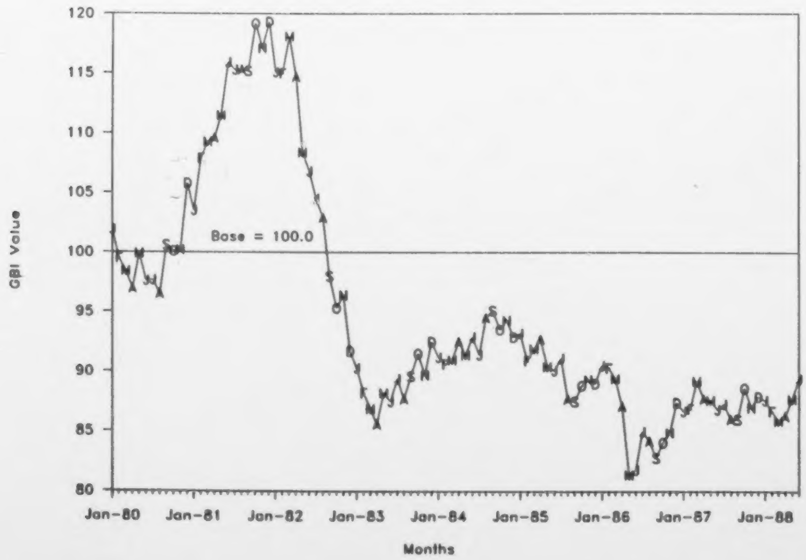
**Oklahoma State General Business Index**
**January 1980 through June 1988**



**Oklahoma City MSA General Business Index**
**January 1980 through June 1988**



**Tulsa MSA General Business Index**
**January 1980 through June 1988**



# State Question 610 – Oklahoma's Unique Economic Development Financing Opportunity

**RODERICK W. DURRELL**

ON SEPTEMBER 20, 1988, the people of Oklahoma will have the opportunity to install an important economic development tool to facilitate capital formation by approving State Question 610[1] providing funding for a Credit Enhancement Reserve Fund (the "Fund").

Approval of State Question 610 will authorize The Oklahoma Development Finance Authority (the "ODFA" or the "Authority"), to issue not more than $100 million principal amount of State of Oklahoma Credit Enhancement Reserve Fund General Obligation Bonds to support the Fund's facilitation of capital formation. Actual issuance of the general obligation bonds will be subject to separate approvals of the State Executive Bond Oversight Commission and the Legislative Bond Oversight Commission.[2]

The Fund was created[3] in 1987 by the Oklahoma Development Finance Authority Act[4] (the "ODFA Act") and the Credit Enhancement Reserve Fund Act[5] (the "CERF Act") as part of the comprehensive Oklahoma Economic Development Act of 1987[6] (H.B. 1444) creating a strategic statutory plan to strengthen and diversify economic activity in Oklahoma. The Fund will be administered by the ODFA[7] and use of the Fund is guided by the ODFA Act and the CERF Act. The CERF Act requires, among other things, the following:

> The Fund shall be employed by the Oklahoma Development Finance Authority *solely* to secure the payment of principal, interest and premium, if any, on the revenue bonds and other financial obligations issued by the Authority pursuant to the Oklahoma Development Finance Authority Act, *for the specific purpose of enhancing and supporting the credit of such revenue bonds and other financial obligations*. No portion of the monies or other assets deposited to the Fund shall be expended or otherwise used by the Authority in meeting its day-to-day operating expenses, in paying the cost of issuance of the Authority's revenue bonds or other financial obligations, or in supporting any other activity of the Authority not directly related to enhancing the credit of the *Authority's revenue bonds and other financial obligations*. (Emphasis added).[8]

Thus, the basic concept is for the ODFA to utilize the Fund to provide additional support to enhance the underlying credit rating of its own project or program debt obligations. In addition, the CERF Act provides the following general industry management standards for the administration of the Fund by the ODFA:

> The Authority is authorized and directed to adopt initial rules and regulations governing the credit enhancement activities and administration of the Fund, including rules and regulations dealing with the subjects of project feasibility, credit evaluation, collateral evaluation, reinsurance, maximum risk retention by the Fund, avoidance of adverse risk selection, and all other factors deemed relevant by the Authority to the decision whether the Fund should provide credit enhancement to a particular issue of debt, to what extent, on what

terms, and for what premium rate.[9]

Under its statutory duty, the ODFA must administer the fund prudently and according to good insurance practice. Such administration will (1) minimize the loss experience of the Fund (i.e., risk management); (2) assure the future viability of the Fund (i.e., preservation of capital); and (3) assure the continuing availability of the proceeds of general obligation bonds issued as a credit enhancement vehicle for bond issues in Oklahoma on an ongoing basis. Accordingly, the granting of credit enhancement by the Fund will be based on principles of insurability generally applied in the credit enhancement/insurance industry.[10]

## Benefits of a Credit Enhancement Reserve Fund

The purpose of a credit enhancement is to obtain or improve an investment grade credit rating to facilitate debt capital formation.[11] By providing a common credit (i.e., the Fund) for a securities offering, several different loans or financings can be aggregated in one ODFA debt financing issue. The credit support of the Fund would provide the following advantages for public and private sector users and beneficiaries:

(1) It would *increase market access* in the capital formation process. In those cases where Fund users/beneficiaries do not have market access because they are non investment grade or they are non-ratable[12], the Fund would provide national capital market access that is not otherwise available to them.

(2) It would *provide reduced financing costs* for the user/beneficiary. Consequently, the credit support of the Fund would provide a value added benefit to a transaction for which premiums can be charged.[13]

(3) Aggregating or pooling smaller loans or financings would *provide economies of scale* in accessing the national capital markets by spreading the fixed costs involved in a securities issue over several discrete projects or loans.

## Need for a Credit Enhancement Reserve Fund

The marketability and investment rating of a debt obligation such as an ODFA revenue bond issue is dependent on the ability of the borrower to repay, i.e., the credit worthiness of the borrower through the cash flow of its revenue sources or the assets which it has to collateralize the borrowing. The marketplace has always respected additional credit sources that enhance the security or ability of an issuer to repay if the underlying credit source should falter. With the volatility of the fixed income markets in recent years, the simplicity of an easily recognized credit enhancement source further facilitates marketing new issues and secondary trading.[14] Credit enhancement methods popularized in recent years include letters of credit; various forms of surety and insurance; collateralization of the borrower's obligation by pledging marketable securities that can be revalued frequently (marked to the market); and standby commitment facilities for purchases of assets to provide liquidity.

In addition to the increased popularity of credit enhancement facilities, a major shift has occurred in the ownership of tax exempt securities. Commercial banks now own a much smaller percentage of outstanding tax exempt securities and institutions (including mutual funds and unit investment trusts whose shares are primarily owned by individuals) own a much larger share of outstanding tax exempt securities than in the past. There are several reasons for this shift of ownership of tax exempt securities which account for the lack of capital market access for smaller, non investment grade rated entities. These reasons include:

(1) Oklahoma banks that used to finance local projects do not need tax exempt income because of the condition of their own earnings.

(2) Under the 1986 Tax Act,[15] commercial banks making tax exempt investments have lost the deductibility (in most cases) of interest that they are incurring in order to invest in tax exempt securities. This is a definite economic disadvantage. This disadvantage is resulting in bank disinvestment in tax exempt securities. Nationally, the 500 largest banks have reduced their tax exempt municipal securities portfolios nearly 25 percent since the end of 1985.[16]

(3) Liquidity has always been important. In current times of market volatility, the banks and other investors that served the smaller, non investment grade or non-rated markets find liquidity even more crucial. However, non-rated or non investment grade securities need to be liquidated. Therefore, they are difficult to place as new issue securities.

The institutional investors that have increased ownership of tax exempt securities require investment grade credit ratings and prefer sizable issues to provide continuing market information and a secondary market for liquidity if portfolio sales are necessary. These secondary market sales are facilitated if a uniform nationally recognized enhanced credit rating is attached to the security.

## Financing Purposes of the Oklahoma Development Finance Authority

Under the ODFA Act, the ODFA has *comprehensive and extensive* powers to provide the means and methods for providing financing assistance for a wide variety of purposes on a state-wide basis. The spectrum of these financing purposes[17] is iterated as follows:

- To expand and establish agricultural and industrial enterprises.
- To provide pollution control facilities.
- To develop public or private energy generating, distribution or conservation facilities and sources.
- To provide health care facilities.
- To provide infrastructure, waste water and capital improvement facilities.
- To provide educational facilities.
- To provide recreational facilities.
- To provide for short term advance funding and the purchase of the obligations of political subdivisions throughout the state.

Several of the ODFA financing purposes, e.g., educational facilities, purchasing obligations of political subdivisions, short term advance funding, infrastructure, waste water and capital improvement facilities are done primarily by public sector entities. Other ODFA financing purposes, e.g., expanding agricultural and industrial enterprises, financing pollution control facilities and private energy facilities, are done primarily by private business sector entities. Consequently, the Fund will have to provide credit enhancement for financing two very different categories of ODFA purposes: public sector functions and private business sector functions. Enhancing each category of financing will have very different criteria for underwriting the insurance commitment of the Fund and the leverage provided in capital formation.

Public sector entities, especially those that have taxing power or a stable source of enterprise revenues, are viewed by the credit rating agencies and the marketplace as being inherently more creditworthy. More leverage can be obtained to support capital formation for these public sector entities because of the lower likelihood of prospective defaults. On the other hand, private business entities that are small are viewed as more speculative in nature, are closely held so financial information may not be readily available, and the business is harder for analysts to analyze. Consequently, the market and credit rating agencies would treat this type of financing much more conservatively than financing for public sector entities and the Fund would have less leverage in supporting capital formation.

Each of the ODFA financing purposes has very substantial state wide capital formation requirements.[18] In addition, until insurance underwriting experience develops into a track record, the leverage of the Fund in supporting capital formation would be expected to be lower than it will be ultimately with a successful track record of risk management. Consequently, it is submitted that the demands on the Fund may far exceed the resources of the Fund to provide for credit enhancement, and this scarce resource may have to be allocated by target market, by geographic distribution and by purpose. In providing such allocation, there should be certain threshold standards and public policies applied by the Board of Directors of the ODFA to allow a widespread use of the Fund so that all 77 counties in the state can have the prospect of participating in the economic recovery stimulated by the Fund and the other development activities which are ongoing in the state.

## Target Markets and Fund Rating Objective

One of the threshold determinations that the Board of Directors of ODFA will have to make is to determine the target level of credit rating that is desired for the Fund. This targeted credit rating is directly affected by the types of credits that are desired to be enhanced by the Fund. For instance, the higher the credit quality of the project that is being insured by the Fund or the higher the credit quality of the portfolio loans in a program insured by the Fund, the better the rating for the Fund perhaps Aa/AA by Moody's Investors Service, Inc. and Standard & Poor's Corporation, respectively, or even Aaa/AAA. However, a portfolio that is predominantly investment grade (to support the higher credit rating) would deny the benefits of the Fund to the many small communities and businesses throughout the state that are non investment grade ratings or that are non-ratable. If the project or program portfolio ~~consists~~ primarily or entirely of these types of credits, the Fund would have to target a lower credit rating, such as an A rating. However, the Fund would be assisting those entities that have the least market access and it would provide the most value added use.

### Public Sector Entities

A public sector entity that can obtain an investment grade credit rating has access to national capital markets. In addition, if an enhancement to an Aaa/AAA credit rating is economically desirable, the entity can obtain credit enhancement from a private credit enhancement provider to facilitate marketing its debt obligation. If the Fund insures this type of credit, the Fund would compete with private sector credit enhancement providers and leave needy entities unserved. However, if the Fund target level is an A credit rating, which would be expected from insuring non investment grade and non-ratable credits, it would not make sense for an investment grade rated issuer to use the Fund enhancement and pay a premium.

### Private Business Sector Entities

Private business entities that are large, well capitalized or "blue chip" companies have, or can obtain, investment grade credit ratings to access national capital markets. They would achieve little benefit from the Fund unless the Fund target rating level is an Aaa/AAA.

However, it is widely held in industrial development circles that most new job creation does not come from these large companies but rather, most new job creation comes from the expansion of existing businesses which are 100 employees or less in size. Most of these firms are too small to obtain a credit rating and are not large enough to obtain bond insurance for long term financing under the more stringent portfolio requirements that monoline bond insurance companies have. These companies need market access for their capital formation and would find it very beneficial to use the Fund enhancement for their financing needs.

### Target Markets Recommendation

If the Fund needs to be rationed, it would make sense for the Fund to target a market that is not being served by private credit enhancement providers. It is submitted that the greatest need for the Fund to facilitate capital formation is for the following categories of credit:

(1) In the public sector, entities which are or would be lower investment grade credit ratings, non investment grade credit ratings, or non-ratable are the entities that are the most needful for Fund support.

(2) In the private business sector, the smaller business entities that are or would be lower investment grade ratings, non investment grade credit ratings, or non-ratable are the entities that are the most needful for Fund support.

Focusing on the above entities as a target market for the Fund would accomplish two purposes: (1) the Fund would not compete with the private credit enhancement providers, but would rather complement that function; and (2) the Fund would meet a public purpose of facilitating capital formation for entities that have to pay higher rates of interest, or may not be able to borrow at any cost because of a lack of market access. Consequently, this approach would provide the greatest value added for the Fund premium charged.

### Fund Rating Objective

It is submitted that the rating level objective for the Fund should be an A credit rating. This provides an investment grade rating marketability for ODFA debt obligations while allowing the Fund to be less selective in its insurance underwriting standards than would be the case for a portfolio that would support an Aaa/AAA credit rating. The lower standards will allow more needful entities to benefit from the Fund enhancement and complement the resources of private credit enhancement providers. There are many more potential reinsurers at the A rating level to increase Fund capacity. Further, the A rating of the Fund will allow a debt obligation of ODFA to be further enhanced by obtaining a wrap-around letter of credit or bond insurance to an Aaa/AAA credit rating if it is economically justifiable.[19] Finally, since the State of Oklahoma full faith and credit rating is Aa,[20] an A rating objective is consistent with the credit rating agencies' concept that financings where the state is morally obligated to provide funding, but not legally obligated to do so (a moral obligation), are rated one full level below the basic full faith and credit rating.

## Allocation of the Fund by Purpose

As previously noted, ODFA is empowered to accomplish many types of public sector and private sector financing purposes. A favorable factor in obtaining the credit rating for the Fund would be a portfolio mix or diversification of purposes which are insured by the Fund so that there is no complete concentration in any one industry or type of financing.

Oklahoma Futures, a statutory public/private economic development planning and coordinating board, conducted an extensive goal setting process in 1987 and early 1988.[21] The Oklahoma Futures' Strategies and Implementing Actions for achieving the State's Five Year Goals for economic development charge ODFA with two major missions in increasing the availability and accessibility of capital: (1) implement infrastructure finance programs; and (2) implement industrial finance programs.[22] It is submitted that the Fund should focus on these two categories of financing purposes to be consistent with the goal setting and planning of Oklahoma Futures.

### Infrastructure Financing

The National Council On Public Works Improvement (the "Council") was created to assess the state of America's infrastructure. In its final report[23] to the President and Congress in February, 1988, the Council defined infrastructure as those public works facilities including highways, mass transit, aviation, water resources, water supply, and waste water, solid waste and hazardous waste disposal.[24] The Council concluded in its final report that: "our infrastructure is inadequate to sustain a stable and growing economy."[25] This illustrates the inter-relation between industrial finance and infrastructure which is directly needed for the functioning of business and is also the foundation for economic development. Further, the Council notes the following in its section entitled "Reinvesting in America":

> While a sound infrastructure does not guarantee future prosperity, long-term economic growth cannot be achieved without it. Economic efficiency and public health both are linked inextricably to adequate transportation, water quality, and waste disposal services. In addition, infrastructure investment directly supports additional economic activity. For every public dollar spent on an annual basis to build and maintain our network of roads, streets, and bridges, the private sector spends $15 to move people and goods. For every public aviation dollar, private firms and individuals spend nine.
>
> If we spend too little on public works or if we invest

> in inefficient projects, society loses more than the direct public cost. In the long run, our ability to compete in the international economy will be weakened, and our standard of living will suffer.[26]

It has been recommended to the Board of Directors of the ODFA that a substantial part of the Fund resources (such as 40 percent) be allocated to enhancing infrastructure improvements financings by the ODFA.

### Private Business Financing

This category covers a number of the iterated purposes for ODFA financing and, therefore, Fund enhancing. In addition, an important public purpose is present because of the current economic need to diversify our economy and to facilitate job growth. It has been recommended to the Board of Directors of the ODFA that a substantial portion of Fund resources (such as 45 percent) be allocated to enhancing economic development financing of private businesses by ODFA, both on a tax exempt financing and taxable financing basis.

Taxable ODFA industrial development bonds or notes, enhanced by the Fund, would be particularly attractive for Oklahoma banks to acquire for investment. In addition to fulfilling customers' financing needs, the securities would offer taxable pricing, enhanced bank asset quality, market liquidity of rated investment paper, and pledgability for collateralization of deposits of public funds,[27] and exemption from State of Oklahoma income taxation.[28]

Although concentration in private business economic development finance can be expected to provide less leverage of the Fund in supporting capital formation, the growth of jobs for citizens of the state is an overriding public purpose to further the improvement in the state economic situation.

### Health Care Facilities Financing

Tax exempt financing for health care facilities, particularly hospitals, has been a large portion of tax exempt finance in the past 15 years. This type of financing is done by public health care agencies or by not for profit [501(c)(3)] organizations.

In most metropolitan areas, the planning policy concern is that there are too many hospital beds. On the other hand, health care is extremely crucial for our aging population and the financing need is particularly acute in the more rural areas of the state and in the smaller health care facilities because they may not meet the threshold criteria of the credit rating agencies. Consequently, they are nonratable, and denied market access regardless of their financial condition or the community need for the facility. It has been recommended to the Board of Directors of the ODFA that a portion of Fund resources (such as 15 percent) be allocated to enhancing ODFA financing of smaller health care facilities which would be primarily in the non metropolitan areas of the state. This would also further diversify the portfolio mix of the Fund.

## Geographic Distribution of the Fund

Since the Fund is supported by state general obligation bonding authorization, it is very important for all areas of the state to have access to the Fund for enhancement. It has been recommended to the Board of Directors of ODFA that the enhancement resources of the Fund be distributed equitably throughout the state. To accomplish this, it has been recommended to the Board of Directors of ODFA that the nine Economic Development Regions created in implementing the state's economic development efforts be utilized. These regions are based on areas of local determination and are coordinated by the Oklahoma Department of Commerce.

The allocation task would be to provide an equitable distribution among the regions. If an equal portion of the credit enhancement resources of the Fund was allocated to each region, the areas with the greatest population, and presumably the greatest capital needs, would not be benefitted proportionately by the Fund. On the other hand, if the Fund is apportioned approximately according to the relative populations, the rural areas may not be properly benefitted because of the greater per capita costs of public functions in sparsely populated areas.

It has been recommended to the Board of Directors of ODFA that the Fund include a policy of making an initial allocation to each of the nine Economic Development Regions in a minimum amount (such as $5 million) with the remaining balance apportioned according to population (based on the latest population estimates). In all cases, loans or projects would have to meet the underwriting standards of the Fund.

Finally, it has been recommended to the Board of Directors of the ODFA that there should be flexibility in the rules and regulations for a policy of redistributing the allocations of the Fund resources from one or more areas to one or more other areas based on actual usage and demonstrated need for the enhancement to benefit the most citizens possible in the state.

## Public Policy Considerations for the Fund

The following policy standards have been recommended to the Board of Directors of the ODFA:

- The Fund should complement private credit enhancement providers rather than competing with private providers. To the extent an ODFA project or program can obtain private provider credit enhancement, it should do so and reserve the capacity of the Fund for other users in the state who have difficult or expensive market access without the Fund.
- The entities that have national capital markets access should do so and use private credit enhancement providers if

enhancement is economically feasible.

- The credit rating objective should be an A rating. This will provide investment grade rating marketability of ODFA debt obligations while allowing the Fund to reach further down in the credit rating strata and assist lower investment grade credit rated, non investment grade credit rated, or nonratable entities. The A level is also consistent with the credit rating agencies' concept that where a state is morally, but not legally, obligated to pay, the credit is rated at least one full level below the state's basic full faith and credit rating.
- The Fund should be geographically targeted for an equitable distribution throughout the nine Economic Development Regions of the state.
- All areas of the state should have equal access to the Fund for enhancement of project or program financings that meet the underwriting criteria of the Fund.
- Planning and technical support, particularly for infrastructure facilities, should be provided as part of any program so that duplication of facilities or poorly conceived facilities are not financed just because a good capital formation mechanism is available from the enhancement by the Fund.
- The minimum project loan guarantee amount should be at a low threshold level to encourage broad participation. However, the amount should not be so low as to have too many small uneconomical loans for servicing and liability management purposes. It has been recommended to the Board of Directors of the ODFA that this minimum level be established at $250,000 and a maximum loan amount be established at $7,500,000, except for extenuating circumstances.
- The ODFA, as administrator of the Fund, should look to see what a community has done to assist itself in financing projects prior to seeking support from the Fund.
- The Fund portfolio (purposes of enhancement commitments) should have a diverse mix among private business finance, infrastructure and small health care facilities.
- The Fund should obtain leverage in the formation of capital consistent with prudent management. However, there is a policy tradeoff in this regard. Seeking greater leverage for the Fund would mean that the Fund will have to be more selective by requiring higher grade credits in the insured portfolio or that greater risk will be shifted to other parties. If greater risk is shifted to other parties, the result will be that the control of the credit/underwriting decision for financing and enhancing projects or programs will shift away from the ODFA to the other parties.
- Reinsurance should be utilized to increase the capacity of the Fund.
- The Fund will need to have liquidity for immediate payment of any claims and a mechanism for a prompt replenishment of any depletion of Fund capital from a secure source, including the general obligation bonding authorization.
- The ODFA will have to organize a group of experienced lending officials with demonstrated credit/insurance commitment experience. However, if the ODFA provides permanent takeout financing in conjunction with bank construction loan financing, existing loan delivery systems would be utilized and administrative duplication would be minimized.

## Conclusion

The State of Oklahoma has enacted a strategic statutory plan to strengthen and diversify economic activity. As part of the implementation of this statutory plan, Oklahoma Futures has conducted an extensive analysis, planning and goal setting process in developing the State's Five Year Economic Development Plan. Passage of State Question 610 to invigorate the Fund and facilitate formation of debt capital in Oklahoma is an integral part of achieving many of the state's economic development goals.

The demand for capital formation in Oklahoma will continue to be immense, especially if we achieve our objective of a growing state economy. This capital demand is in both the public sector and the private business sector. Public sector capital demand most pertinent to the Fund is for infrastructure which forms a necessary foundation to strengthen, increase and diversify Oklahoma's economic activity. Private business sector capital demand will support growth in established businesses and attraction and establishment of new businesses to strengthen, increase and diversify Oklahoma's economic activity. Passage of State Question 610 to invigorate the Fund and facilitate formation of debt capital in Oklahoma will directly assist the achievement of the public policy economic goals.

It is submitted that State Question 610 is a unique opportunity for Oklahoma to install an important economic development tool to facilitate capital formation.

## Notes

[1] State Question 610 is provided for by House Joint Resolution Number 1034 (H.J.R. No. 1034) enacted by the second regular session of the 41st Legislature and enrolled on January 26, 1988. H.J.R. No. 1034 provides for a referendum on the following proposed amendment to Article X of the Constitution of the State of Oklahoma by adding a new Section 42 which reads as follows:

> The Oklahoma Development Finance Authority is hereby authorized to issue general obligation bonds, in an amount not to exceed One Hundred Million Dollars ($100,000,000.00), for the purpose of providing an economic development credit

> enhancement reserve fund for the Authority. This fund shall be used by the Authority solely to secure the payment of principal, interest and premium, if any, on the revenue bonds and other financial obligations issued by the Authority after other pledged monies and other reserve funds are used to the extent allowable by law. The Legislature shall provide sufficient appropriations to pay the principal and interest of any general obligation bonds issued pursuant to this resolution. Further, the Legislature shall establish a method by law to provide for issuance of the bonds or portions thereof when it is necessary and to provide for administration of the economic development credit enhancement reserve fund.

For a companion state question, see State Question 611 (House Joint Resolution Number 1035) which allows the Oklahoma Center for the Advancement of Science and Technology ("OCAST") to use public funds not exceeding 1 percent of total state appropriations for the current fiscal year to promote economic development through grants or loans to individuals, companies, corporations or associations and by investing in private enterprises. State Question 611 would amend Section 15 of Article X of the Constitution of the State of Oklahoma.

[2] 74 Okla. Stat., §5063.11D (Supp. 1987). The Executive Bond Oversight Commission is composed of five members: the Governor, the Lieutenant Governor; the Director of the Oklahoma Department of Commerce; and two persons appointed by the Governor; 62 Okla. Stat., §695.5A (Supp. 1987). The Legisative Bond Oversight Commission is composed of six members: the chairs of the following Oklahoma State Senate Committees - Appropriations, Economic Development, and Judiciary; and the chairs of the following Oklahoma House of Representatives Committees - Appropriations and Budget, Economic Development, and Judiciary; 62 Okla. Stat., §695.4A (Supp. 1987).

Separate approvals of the Executive Bond Oversight Commission and the Legislative Bond Oversight Commission are required for the commitment of credit enhancement by the Fund for any bonds issued by the ODFA, 74 Okla. Stat., §5063.4F (Supp. 1987). In addition, the two Oversight Commissions have to approve or disapprove any bonds or indebtedness being issued by the ODFA to the extent such bonds or indebtedness are supported pursuant to the CERF Act, 62 Okla. Stat., §695.8A.3 (Supp. 1987).

[3] Creation of the Fund is provided for in 74 Okla. Stat., §5062.12 (Supp. 1987) which states: "The Oklahoma Development Finance Authority is authorized to create an insurance fund consisting solely of funds deposited pursuant to Section 81 of this Act [74 Okla. Stat., §5063.11 (Supp. 1987)]." That section authorized the ODFA "to issue State of Oklahoma bonds, to be known as Credit Enhancement Reserve Fund General Obligation Bonds, in a total principal amount not to exceed $100,000,000." (Parenthetical added).

[4] 74 Okla. Stat., §§5062.1 - .22, (Supp. 1987).

[5] 74 Okla. Stat., §§5063.1 - .20, (Supp. 1987).

[6] Oklahoma Economic Development Act of 1987, Ch. 222, 1987 Okla. Sess. Laws. 1319. See generally Rogers, *The Oklahoma Economic Development Act of 1987 – A Key to Oklahoma's Future?*, 59 Okla B.J. 805 (1988).

[7] 74 Okla. Stat., §5063.3 (Supp. 1987).

[8] 74 Okla. Stat., §5063.4A (Supp. 1987).

[9] 74 Okla. Stat., §5063.4B (Supp. 1987).

[10] *Ibid.*

[11] The two primary credit rating agencies for public debt issues are Moody's Investors Service, Inc. and Standard & Poor's Corporation. The rating assessment categories are similar for the two agencies although the symbols vary. The investment grade ratings for the respective agencies are shown below:

Moody's: Aaa (highest rating); Aa; A, and Baa.
Standard & Poor's: AAA (highest rating); AA; A; and BBB.

An assigned credit rating is not a recommendation to buy, sell or hold a debt security and a rating is subject to change, suspension or withdrawal by the agency making the assignment.

[12] A non investment grade credit rating is a credit that is assigned a rating below Baa (Moody's) or below BBB (Standard & Poor's). Non-ratable entities would be ones that do not meet the threshold requirements of the credit rating agencies for a credit rating assessment.

[13] 74 Okla. Stat., §5062.12 (Supp. 1987).

[14] Credit enhancements to the highest investment grade rating (Moody's Aaa and Standard & Poor's AAA) have been very popular in the marketplace. In 1987, the long term municipal bond volume was $104.6 billion according to the Public Securities Association ("PSA"). Of this amount, it is estimated that approximately 20 percent ($19.4 billion per PSA) of the volume was supported by insurance from monoline bond insurance companies as a credit enhancement and another 10 percent ($11.1 billion per PSA) of the volume was supported by international banks' letters of credit as a credit enhancement.

The economic viability of purchasing such a credit enhancement depends on the interest yield curve difference between a Baa/BBB or an A rated offering and an Aaa/AAA rated offering and whether the present value of the future interest rate savings exceeds the cost of the fee paid to the credit enhancement facility provider. However, an enhancement does not have to seek the highest investment grade rating to add value. Providing the highest investment grade rating is primarily a marketing strategy for the third parties which independently provide such enhancements.

[15] Tax Reform Act of 1986, 26 U.S.C. §1 et seq (1986).

[16] Krepa, *Banks Cut Municipal Holdings 14% in '87*, American Banker - Bond Buyer Credit Markets, May 9, 1988, §2, at 17.

[17] See *inter alia*, 74 Okla. Stat., §§5062.2B1-10, .3C, .5, and .8 (Supp. 1987).

[18] For instance, the Infrastructure Task Force of the Oklahoma Futures planning process reported a total known infrastructure needs estimated cost, including statewide water conveyance ($7.804 billion) and chloride control ($1 billion), of $43.271 billion from 1985 - 2000, assuming no population growth and service of current needs only. Of these estimated costs, there was a potential infrastructure funding shortfall of $22.171 billion. Infrastructure Task Force, Oklahoma Infrastructure Study II: Report and Recommendations to Oklahoma Futures for the Oklahoma Five Year Economic Development Action Plan, at 79 (December 30, 1987).

[19] 74 Okla. Stat., §5062.12 (Supp. 1987).

[20] Moody's Investors Service, Inc. rates the full faith and credit (general obligation) of the State of Oklahoma Aa, the second highest credit rating available. The State of Oklahoma's general obligation credit has not been rated by Standard & Poor's Corporation in the past although revenue bond projects and programs of numerous state agencies have been rated by Standard & Poor's.

[21] 74 Okla. Stat., §§5002.1-.6, (Supp. 1987). Oklahoma Futures is a statutory board consisting of 21 members. The mission of Oklahoma Futures is "to develop strategic economic policies, to maintain the integrity of economic development purposes across all state institutions, policies and programs and to be Oklahoma's originator, proponent, coordinator and overseer of state analyses and plans." 74 Okla. Stat., §5002.2 (Supp. 1987).

In 1987 and early 1988, Oklahoma Futures conducted an extensive analysis, planning and goal setting process. Eighteen separate Task Forces involving 650 Oklahomans submitted reports to Oklahoma Futures at the end of 1987. These reports were consolidated and condensed and in January, 1988, Oklahoma Futures established 13 goals for the state. In February, 1988, 20 strategies were adopted to accomplish the goals and on March 24, 1988, Oklahoma Futures adopted the "Strategies and Implementing Actions for the Oklahoma Five Year Economic Development Plan."

ODFA had to submit a schedule of activities to Oklahoma Futures to facilitate development of the first five year plan provisions applicable to the ODFA and has to submit an annual business plan to Oklahoma Futures for approval. 74 Okla. Stat., §5062.4 (Supp. 1987).

[22] Strategies and Implementing Actions for the Oklahoma Five Year Economic Development Plan, at 11. (March 24, 1988) (as adopted by Oklahoma Futures).

[23] National Council on Public Works Improvement, Fragile Foundations: A Report on America's Public Works (1988), p. 2.

[24] *Ibid.*, p. 2.

[25] *Ibid.*, p. v.

[26] *Ibid.*, p. 9.

[27] 74 Okla. Stat., §5062.13 (Supp. 1987).

[28] 74 Okla. Stat., §5062.11 (Supp. 1987).

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*Author's Note: On May 25, 1988, the author submitted a comprehensive Phase I Report to the Board of Directors of The Oklahoma Development Finance Authority concerning public policy and financial guarantee concepts regarding the implementation of the Oklahoma Credit Enhancement Reserve Fund Act of 1987. The material herein is derived from that Report.*

# *The Oklahoma Insurance Premium Tax: A Tax That Didn't Work*

**LARKIN WARNER**

TAX INCENTIVES TO promote economic development have expanded substantially in Oklahoma in recent years. These have included five-year ad valorem tax exemption for new manufacturing and processing facilities, sales tax exemptions for the purchase of new plant and equipment, and various incentives aimed at stimulating entrepreneurial activity. Oklahoma's economic difficulties following the close of the oil boom in 1982 have no doubt stimulated interest in tax incentives. But there is nothing new about Oklahoma's use of tax incentives to promote economic development; such incentives can be found in the treatment of the insurance industry in the state's 1907 constitution. Moreover, such incentives do not always work; the 1988 session of the Oklahoma Legislature abolished the state's long-standing system of tax incentives operating through the state insurance premium tax.

Rhetoric in support of tax incentives to promote business growth emphasizes that the state and local tax revenues foregone through such policies are offset by the positive effects of general economic expansion—perhaps even to the extent that the net effect on public budgets is positive. At the very least, an individual state must offer a system of incentives because other states are doing the same. Whatever their merits from an economic development point of view, these incentives almost always violate generally accepted principles of tax policy. This was certainly true of the Oklahoma insurance premium tax prior to 1988. The balance of this article introduces the pre-1988 Oklahoma insurance premium tax, reviews the significance of the insurance industry in the Oklahoma economy, evaluates the tax in the context of the principles of a "good" tax, and explains how the 1988 legislative session reformed the tax.

## The Oklahoma Insurance Premium Tax

In recent years, Oklahoma's insurance premium tax has generated between three and four percent of the state government's total tax revenue (Table 1). The state's 1907 constitution established a two percent (minimum rate) insurance premium tax to be paid by "foreign" insurance carriers with home offices out-of-state. Insurance carriers are firms that issue policies; some carriers sell directly to the public while many operate through independent agents. In 1941, the legislature raised the rate to four percent—a rate which until 1988 was one of the highest in the nation. By taxing foreign insurance carriers and exempting domestic (in-state) carriers, the state attempted to promote a home-grown insurance industry. In 1945, out-of-state companies were provided the opportunity to reduce their Oklahoma premum tax to the extent that they placed a share of their assets in Oklahoma securities—the greater the share, the lower the rate, with a rate of zero percent being reached for firms investing 30 percent or more in Oklahoma. Oklahoma securities were defined broadly to include state and local government debt, bank deposits, and other property and securities.

In 1981, a group of out-of-state companies initiated a court challenge to Oklahoma's premium tax law as a discriminating violation of the U.S. constitution's equal protection clause. A significant share of the premium tax began to be paid under protest. The matter dragged on, and in an attempt to remove the basis for the equal protection challenge, the law was changed in 1985 to apply the premium tax and investment incentive to all carriers both foreign and domestic. In 1987, a group of the protesting

**TABLE 1**

**Insurance Premium and Total State Tax Revenue**
**Oklahoma**
**Selected Years 1974-1986**
**(millions of dollars)**

| Fiscal Year | Total Tax Revenue | Insurance Premium | Insurance Premium as a Percent of Total |
|---|---|---|---|
| 1974 | $ 777.5 | $ 27.6 | 3.5 |
| 1976 | 1,000.2 | 33.3 | 3.3 |
| 1978 | 1,315.5 | 49.0 | 3.7 |
| 1980 | 1,776.0 | 54.1 | 3.0 |
| 1982 | 2,713.0 | 71.7 | 2.6 |
| 1984 | 2,662.0 | 100.3 | 3.8 |
| 1986 | 2,959.6 | 112.5 | 3.8 |

Source: U.S. Bureau of the Census, *State Government Tax Collections*, 1974-1986.

carriers reached a settlement in which the state agreed to return $35 million. However, a group of companies continued the court challenge because the sliding scale of rates based on investment in Oklahoma securities was discriminating against large, out-of-state carriers. For example, a giant life insurance carrier incorporated elsewhere with assets of $100 billion could hardly be expected to invest $30 billion in Oklahoma. A small, Oklahoma-based carrier with a few million dollars in assets would have no trouble placing 30 percent in Oklahoma. Moreover, the Oklahoma law was alleged to discriminate against life insurance carriers in comparison with property and casualty companies. The latter maintain a much lower ratio of total assets to premiums than do life insurance companies.

## The Insurance Carrier Industry and the Oklahoma Economy

At the national level, the insurance carrier industry is responsible for about 1.3 percent of total U.S. employment and generated 273 thousand new jobs between 1986 and 1986.[1] It is also a relatively high-wage industry nationally. These growth characteristics make it an excellent candidate for state economic development policy. In Oklahoma, however, the industry exhibited no growth throughout much of the '80s, with employment hovering around nine thousand jobs through early 1987 and dropping to slightly below eight thousand in 1988.[2] Moreover, the insurance carrier industry in Oklahoma appears underdeveloped in comparison with the rest of the nation; with 1.3 percent of the U.S. population, the state accounted for only 0.7 percent of 1986 U.S. insurance carrier employment.

## How Did the Tax Measure Up?

Four of the most important criteria used to evaluate particular tax sources are efficiency, equity, stability, and economic development. The Oklahoma insurance premium tax prior to 1988 fell short on all four grounds.

***Tax Efficiency.*** All taxes reduce the disposable income of taxpayers. In addition, a tax drives a wedge between the private costs of producing a good or service (insurance) and the price paid by the purchaser (a premium). If it is assumed that the free market generally does the best possible job of allocating resources to the benefit of society, then a tax is efficient to the extent that it interferes as little as possible with this free market allocation. The higher the tax rate and the more narrow the tax base, the greater is this interference.

With a four percent premium tax rate roughly twice the national mean and mode, Oklahoma chose to drive a bigger wedge between the premium price and the private costs of producing insurance than was found elsewhere. From a national efficiency point of view this meant that Oklahoma businesses and households were using a suboptimal aggregate amount of insurance. *It was as though state government in Oklahoma set out to discourage the purchase of insurance in comparison with other states.* Viewed this way, the pre-1988 Oklahoma premium tax did not grade well in terms of efficiency.

A tax which is broadly applied is also more efficient than one with a narrow base. Oklahoma's insurance premium tax base extempted certain forms of health insurance such as Blue Cross/Blue Shield and health maintenance organizations. Self-insurance programs by business firms were not included and would be difficult if not impossible to cover.

***Tax Equity.*** The principle of tax equity focuses on the economic characteristics of those who pay a tax. In an ultimate sense, the incidence or burden of an insurance premium tax is on the general public. The insurance carrier industry is highly competitive and must earn a normal after-tax return on investment. The same can be said of most businesses which purchase insurance. Individuals, of course, spend a good deal directly on personal insurance. The premium tax is thus paid directly by, or passed on to, the public in general.

Tax equity has horizontal and vertical dimensions. The criterion of horizontal equity is fulfilled when taxpayers in like circumstances pay the same taxes. Vertical equity requires greater tax payments from those with greater ability to pay. A regressive tax which takes a larger share of income from the poor than from the wealthy violates this criterion; a proportional or progressive tax does not.

From a nationwide viewpoint, the pre-1988 Oklahoma tax violated the principle of horizontal equity. Why, for example, should a Missouri taxpayer pay a rate half as great as an Oklahoman taxpayer in similar circumstances? Horizontal equity was further violated by the practice of other states to levy a retaliatory state premium tax on Oklahoma carriers doing business in their jurisdiction. This meant that an Oklahoma-based carrier selling in Missouri would have to pay a four percent rate, while firms from many other states (with lower rates) were paying less on their Missouri premiums.

Within Oklahoma, horizontal equity was violated by the scaled reductions in the rate for carriers investing in Oklahoma. Many out-of-state firms could not access the lower rates. The practice also favored property and casualty companies over life companies because of their lower ratios of assets to premiums.

Oklahoma legislation passed in 1987 provides credits against the state's premium tax for jobs associated with the establishment or expansion of regional home offices after November 1, 1987.[3] The purpose of this measure was to attract a regional home office of a major carrier company to Tulsa. This measure clearly violates the principle of horizontal tax equity; such credits are not available for carriers incorporated in Oklahoma or to out-of-state carriers with already-existing Oklahoma facilities.

With a flat rate of four percent applying to most carriers, the Oklahoma premium tax was probably broadly proportional when evaluated in terms of vertical equity. People and firms paying higher premiums pay higher taxes. However, for insurance by individuals, the tax was probably regressive with respect to the very poor. Consumers with less than $5,000 in 1982-1983 income spend a significantly higher share of their income on life and other personal insurance.[4] This meant that a four percent premium tax took a larger share of their income than for people in higher income classes. For health insurance, the premium tax appeared to be generally regressive; the share of income devoted to health insurance falls rather steadily as income rises. Auto insurance is progressive with respect to the very poor only because many cannot afford vehicles or avoid carrying insurance.

***Tax Stability.*** A tax that generates revenues varying wildly from year-to-year does not provide a reliable source for funding government services. Moreover, revenue should grow along with the general economy. Oklahoma's pre-1988 insurance premium tax was fundamentally a stable and reliable source of revenue. Compound annual growth rates for premium tax revenue illustrate the tax source's relative stability as calculated from Table 1.

| | | |
|---|---|---|
| Fiscal years | 1974-1980: | 11.9 |
| | 1980-1986: | 13.0 |
| | 1974-1986: | 12.4 |

Unfortunately for Oklahoma state government, since protest suits began in 1981, the premium tax became a source of subtantial revenue instability. Table 2 reports the premium tax revenues actually flowing into Treasury Funds since fiscal 1977. Wild swings in available premium tax revenue occurred after 1981 because a portion of the tax paid under protest was placed in an escrow account and because the state later dipped into that account to alleviate severe fiscal stress associated with the collapse of the energy boom in fiscal 1983. Due to questions of constitutionality, what should have been a relatively stable tax source became quite unstable.

***Economic Development.*** As noted at the outset, economic development incentives are becoming an ever-increasing element in state tax policies. The provisions in existence from 1907 to 1985 exempting in-state companies from the tax certainly did not stimulate a vigorous concentration of insurance carriers within the state's borders. No doubt there are historical complexities explaining the concentration of carriers in states such as Connecticut and Massachusetts—states with somewhat longer histories than Oklahoma's. However, with a state premium tax rate roughly twice the national average, and with other states practicing retaliation against Oklahoma, state-based carriers faced

TABLE 2

Treasury Fund Receipts
Total and Insurance Premium Taxes
Oklahoma
Fiscal Years 1977-1987
(millions of dollars)

| Fiscal Year | Total Tax Revenue | Percent Change | Insurance Premium Tax | Percent Change | Insurance Premium Tax as a Percent of Total |
|---|---|---|---|---|---|
| 1977 | $ 989.1 | | $38.3 | | 3.9 |
| 1978 | 1,167.4 | 18.0 | 49.0 | 27.9 | 4.2 |
| 1979 | 1,350.2 | 15.7 | 49.6 | 1.2 | 3.7 |
| 1980 | 1,602.2 | 18.7 | 50.5 | 1.8 | 3.2 |
| 1981 | 2,041.8 | 27.4 | 71.7 | 42.0 | 3.5 |
| 1982 | 2,432.9 | 19.2 | 32.1 | -55.2 | 1.3 |
| 1983 | 2,595.5 | 6.7 | 86.2 | 168.5 | 3.3 |
| 1984 | 2,442.1 | -6.7 | 68.0 | -21.1 | 2.8 |
| 1985 | 2,716.7 | 12.2 | 69.3 | 1.9 | 2.6 |
| 1986 | 2,931.6[a] | 7.9 | 71.9 | 3.8 | 2.5 |
| 1987 | 2,592.4[a] | -11.6 | 64.5 | -10.3 | 2.5 |

Source: Office of State Finance, Schedule II reports.

[a] Includes Tag Agent funds not previously treated as taxes.

about a two percent penalty as they attempted to expand their business beyond Oklahoma's borders. What was intended to be a stimulus to the development of a domestic insurance industry was actually a deterrent.

The insurance premium tax was also intended to promote economic development by providing an incentive to insurance carriers to invest in "Oklahoma securities." Since the tax rate reduction stimulus was based on percent of assets placed in Oklahoma, the economic development stimulus violated the tax equity criterion. Worse, yet, the policy reflected a misunderstanding of the distinction between financial and real investment and generated a taxpayer cost far above what could be justified to attract the financial investment results.

Economic development occurs in Oklahoma when financial investment takes the form of *new* plant and equipment. No economic development occurs when an insurance carrier purchases an *already existing* physical asset in Oklahoma or when it purchases a previously issued financial security such as a municipal bond. Thus, there was no necessary link between the premium tax investment incentive and state economic development.

Economists use the concept of "tax expenditures" to quantify the effects of any special tax "breaks", "loopholes" or incentives. For the insurance premium tax, the Oklahoma investment incentive program tax expenditure for a particular carrier is the difference between the tax which would have been paid at the four percent rate and the tax which was actually paid. When this procedure is applied to all carriers taking advantage of the investment incentive in calendar 1986, a total tax expenditure of $36.5 million emerges. Premium taxes would have been roughly $36.5 million higher if the investment incentive program had not been in place. Put differently, Oklahoma state government engaged in a tax expenditure of $36.5 million to achieve the investment policy goals of the tax statute.

The twelve carriers receiving the greatest benefit from the investment program were the beneficiaries of $23.3 million in tax expenditures—64 percent of the total (Table 3). Based upon the reported assets of these firms and the actual rate they paid, it is possible to estimate the actual investment in "Oklahoma securities" required. In 1986, this annual flow of $23.4 million in tax expenditures was responsible for a stock of Oklahoma financial investment of $267.1 million. One dollar of annual state tax expenditure supported $11.41 in state financial investment. If the rest of the firms participating in the program were about the same as the twelve largest, the $36.5 million tax expenditure would support investment of about $417 million. This means that in addition to the private returns necessary to sustain $417 of investment (say, 10 percent) state government contributed another 8.7 percent. A combined public and private interest cost of 18.7 percent is well above a normal return and in excess of what is needed to attract low-risk financial investment to the state.

## The 1988 Insurance Premium Tax Law

When a partial settlement was reached in 1987 between the state and insurance carriers challenging the constitutionality of the tax, the state agreed to establish an "Interim Study Group" to examine the law and make recommendations to the Governor and Legislature. The Study Group's report, issued in early February, 1988, recommended dropping the rate from four percent to two percent and expanding the tax base to include Blue Cross companies and health maintenance organizations (HMOs). The lower rate was to apply only to life insurance; the existing system of a four percent rate and discounts for investment in "Oklahoma securities" would be maintained for property and casualty companies. The Study Group anticipated vigorous political opposition to eliminating the tax breaks for the property and casualty companies.

The Oklahoma Legislature determined that insurance premium tax reform should apply to both life and property and casualty carriers as well as Blue Cross and the HMOs. House Bill 2013 was signed into law in late March, 1988, and provided for a quick phase out of the investment incentives during 1988. After that the rate will be 2.25 percent. The new tax policy will be essentially revenue neutral raising about the same total amount as was paid under the old tax. The Legislature and Governor had made a major stride in reforming the insurance premium tax by cutting the rate nearly in half and broadening the base. This reform removed the

TABLE 3

Impact of Investment Incentives
Twelve Insurance Companies
Receiving Largest Tax Expenditure
Oklahoma
Calendar Year 1986

| | Tax Expenditure by State Government (000) | Percent of Total Tax Expenditures | Assets (000) | Minimum Investment in Oklahoma[a] (000) |
|---|---|---|---|---|
| Top 4 participants | $13,857 | 38 | $ 373,789 | $112,137 |
| Top 8 participants | 19,478 | 53 | 508,231 | 152,469 |
| Top 12 participants | 23,350 | 64 | 1,113,839 | 267,107 |

Source: State Insurance Commissioner, *80th Annual Report and Directory, 1987;* special computer printout of companies with tax rate less then 4 percent.

[a] Based on tax rate paid.

challenge of unequal treatment of carriers and freed up $48.3 million of premium tax revenue which had been held in the protest fund.[5] In this case, at least, a tax that measures up favorably with respect to criteria of efficiency, equity, and stability may turn out to be a good tax promoting economic development through state-based insurance carriers.

## Notes

[1] *Survey of Current Business*, (July 1983), p. 83; (July 1987), p. 61.

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# *International Trade Development in Oklahoma: A Synopsis of the Problem and a Review of the Literature*

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## Introduction

THE IMPORTANCE OF Oklahoma economic development as an issue of concern to business and political leaders is perhaps suitably indicated by the large volume of economic development studies, analyses and recommendations generated. By one specific count, made by Professor Olson in a recent bibliographic report, over 90 such papers are available on the Oklahoma economy, with the vast majority being written in the mid-1980s.[1]

The purpose of this article is to supplement the Olson Report with an evaluation of studies and recommendations relating to the increasing globalization of markets and trends affecting Oklahoma's economic development and the state's reaction to these problems and opportunities. The concept of "international trade development" is widely used to describe efforts to increase the state-based activity of exporting goods and services, overseas sourcing and production of components and final goods, technology licensing and other forms of international business as well as foreign investment in the state, international aspects of tourism and the more general cultural interactions between Oklahoma residents and foreign citizens. The main emphasis here, however, is on export promotion.

## Oklahoma International Trade Trends

Oklahoma is already, and historically has been, involved in international business. During 1984, Oklahoma manufacturers sold goods to foreign buyers worth an estimated $1.2 billion in direct international sales. Another $1.1 billion of manufactured shipments was attributed to export sales of out-of-state firms yielding a total of $2.3 billion of export-related output. In total, 9.3 percent of the value of Oklahoma manufacturers' shipments were export-related compared with 11.9 percent for the U.S. as a whole.

At a more disaggregated level, five of nineteen aggregated industries accounted for 80 percent of Oklahoma's total direct exports of manufactures—(in descending order of importance) nonelectrical machinery including oil and gas field equipment; food and kindred products; transportation equipment; fabricated metal products; and petroleum and coal products.

Oklahoma's share of national agricultural exports fell to $354 million in FY 1986 from $470 million in 1985 and a peak of $970 million in 1980. Wheat and wheat products accounted for $245 million of Oklahoma's share of commodity exports based on relative production levels. The actual quantities of commodities physically exported from individual states are not estimated by the U.S. Department of Agriculture.

In brief, at least the larger Oklahoma firms in the five export-oriented sectors would appear to have international exporting experience through current sales or activity prior to the sharp increase in the value of the dollar and the drastic fall in sales to Latin America as a result of their debt accumulation. Nevertheless, the typical U.S. pattern of nonexporting by small and medium-sized firms with the potential to do so can be projected to Oklahoma. It is the attempt to get the production of these firms into international markets for the profits and employment that may be generated that forms the goal of international trade development and the recommendations for action that follow.

## Scope of Literature Review

In many ways, international trade

development cannot be separated from the general field of economic development in a local, regional and/or national context. Indeed, it is generally necessary that individuals, firms and communities "progress" along a track of learning and growth, technology improvement and quality adjustment, added cultural sensitivity and awareness, and increasing sophistication with business methods and communications before international dealings become an important and natural part of everyday activity. Nevertheless, a test of "directness of international impact" can be used to reasonably identify items of particular importance to economic development through international trade.

The few studies that have specifically addressed Oklahomans' willingness and ability to participate in economic development through expanding international activity are described below. The collection of recommendations summarized are a synthesis and summarization of these individual reports and isolated references to similar recommendations in the general economic development literature.

The first detailed committee consideration of international trade in the recent period was a Task Force Report for the Oklahoma Council of Science and Technology.[2] Results of a session-long study by a joint committee of the Oklahoma legislature were summarized in a report with recommendations in early 1987 in conjunction with a second annual day of international trade programs presented in the state capitol.[3]

Detailed study conclusions and recommendations specifically prepared for the City of Tulsa under a contract with Arthur D. Little, Inc. with financial support from various Tulsa sponsors and the Economic Development Administration were presented in a series of meetings in Tulsa and in written form in early 1987.[4] Still more recently, an additional International Development Task Force was created as part of the comprehensive, statewide involvement of citizens through 17 such committees to formulate an economic development action plan by Oklahoma Futures.[5]

Finally, region-wide international business efforts have been thoroughly reviewed and additional recommendations generated by the staff and contracted researchers for the Southern Growth Policies Board in a series of papers published as the *Southern International Perspectives* (SIP).

## The International Trade Development Recommendations

The goal of export promotion and reverse investment activities of state and federal governments is to increase the level of economic well-being, a goal seen as almost identical to job creation. In fact, in a recently approved list of thirteen goals, Oklahoma Futures' Five-year Economic Development Goals contains the following:

**Goal #10:** Increase exports of manufactured goods as a percent of total Oklahoma manufactured shipments to the national average (in 1984 -6.7 percent); and Raise the proportion of Oklahoma agricultural exports to 2 percent of total U.S. agricultural exports.

**Goal #13:** Raise Oklahoma's share of foreign investment in new or expanded facilities to a rate exceeding Oklahoma's share of national population; and

Increase Oklahoma's share of foreign firm new employment as a result of foreign firm investment.

To achieve goals such as these, the various advisory boards recommended a substantial list of actions for various public and private sector organizations. In the summary to follow, the recommendations are collected into major categories and stated in general terms. No attempt is made to include the more specific details or exact wording of the individual statements.

### Export Awareness and Technical Assistance

General Recommendation: *Educators and federal and state international trade specialists must develop an awareness in the business community of both the national need for, and the potential profitability of, international trade. Furthermore, information and advice on the specific techniques of international trade must be provided so that small and medium-sized firms can effectively manage their foreign trade transactions.*

Any international marketing text can provide a long list of reasons why firms should consider exporting and/or other forms of international business. In almost all cases, these reasons boil down to increased profits for the firm and, from a national perspective, added employment and a smaller merchandise trade balance.[6] Motivations may be proactive—such as desire to exploit unique products, new technology, economies of scale, etc.—or more reactive—such as a need to defend against foreign competitive pressures, overproduction, excess capacity, and so forth.[7]

Of course, the large U.S. multinational firms are, and have been for some time, on the leading edge of all forms of international business. It is the nation's small and medium-sized companies (SMCs) that are charged with disinterest and lack of skill in foreign trade. In Oklahoma, for example, it has been estimated that perhaps only one-half of the firms with products appropriate for overseas markets are currently exporting and one out of four firms that are not exporting now think they could develop foreign markets.[8]

To the extent that the complexities of doing business abroad and the differences between exporting and domestic selling are being correctly perceived as major problems capable of firm-level solutions, targeted awareness programs and training seminars for international trade specialists in progressive, regional manufacturing and tradeable services firms should help overcome deficiencies that often lead to inadequate consideration of international business as an alternative business growth strategy. Determining the exact information needs of exporters at various stages of the internationalization process is the subject of extensive literature in international marketing.[9]

### Targeting and Market Research

General Recommendation: *Decision-making by producing firms and the public and private sector support organizations can be improved with applied research identifying firms, markets (countries) and products with the greatest potential for new or expanded exporting.*

According to a current international text, "Even though most managers recognize the need for domestic market research, the single most important cause for failure in the international marketing place is insufficient preparation and information."[10] Doing this type of research is different since international marketing does involve (1) more factors to consider with each additional country market, (2) new parameters of foreign exchange, alternate business practices, tariffs, quotas, etc., (3) an unfamiliar and complex environment of different cultures, languages, tastes and political systems, and (4) many new varieties of competition in products, costs, qualities, technology, and so forth. Many SMCs do not have the time or personnel to devote to this process, at least initially in the internationalization process.

This general conclusion was further substantiated in the Tulsa Report with the conclusion that an export promotion program should concentrate on "...the needs most often expressed by companies in Tulsa:

- Identifying market opportunities
- Developing a market entry strategy
- Building an overseas distribution network."[11]

Specific one-on-one counseling to advise firms on the filtering, organization, evaluation and use of the huge quantities of raw data available is the most frequently given recommendation to assist the international marketing of SMCs. Providing specialists in formulating international marketing business plans to work with the assigned personnel of the firm and the trade specialists of the regional International Trade Administration offices through the early stages of acquiring skill and experience in exporting is one frequently recommended method of direct market entry assistance for the new-to-export and new-to-market local firms.

### Database Development

General Recommendation: *The generation and dissemination of knowledge and information required for modern international business transactions and promotion efforts would significantly benefit from the development of modern electronic databases related to marketing research, business practices and trade restrictions, foreign contact and evaluation information, local sources of counseling and assistance, trade opportunities and leads, etc.*

The importance of detailed, accurate and timely information for international trade development is indicated by sections of the "Omnibus Trade and Competitiveness Act of 1988" calling for the establishment of a *National Trade Data Bank* consisting of an export promotion data system designed to be useful to business and an international economic data system containing information useful to policymakers and analysts concerned with international economics. The system would reportedly be an extension of the current computerized system developed for the ITA district offices called "CIMS."

On the local level the recommendations for database development include:

(1) a database of exporting firms, trade service organizations and statistical series of products sold by geographic market for targeting assistance efforts and educational services.

(2) an electronic bulletin board type of system for sorting and disseminating trade opportunity leads, bid opportunities for the multinational and international development organizations, and information exchanges among private companies in international commerce willing to "piggyback" new products on their existing distribution channels.

(3) a database of state personnel including foreign language interpreters and cultural specialists, executives with overseas management experience, foreign exchange scholars and others with extensive travel experience and a directory of trade service specialists.

(4) a database of foreign nationals who have graduated from the state's colleges and universities, or otherwise have become familiar with Oklahoma and its products, a network of "Oklahoma Ambassadors."

Given the computerization of most business analyses and the international trade shipping, export certification and documentation processes, it is inevitable that individual business will be linked with entire networks of local, national, and international database services. Oklahoma—through the joint efforts of Oklahoma State University, the University of Oklahoma and the Oklahoma Department of Commerce—is developing a statewide system of electronic information generation and dissemination called "ORIGINS" (for Oklahoma Resources Integrated General Information Network System) that can provide such services for all aspects of international trade development.

### Export Financing

General Recommendation: *The state government should provide, or guarantee private bank lending of, export financing for pre-export and foreign trade credit needs of the small and medium-sized exporters who cannot obtain such funding on competitive terms.*

As noted in the Tulsa International Trade Initiative Report, "...one of the principal constraints faced by exporters is difficulty in securing pre-export working capital. Large international banks do not find small export transactions profitable; smaller banks do not have the expertise to evaluate international transactions and are hesitant to enter into export deals."[12] When complex international financial instruments, such as the many forms and variations of letters of credit, and the politicial and commercial risks of export contracts are considered, it also becomes very difficult for the SMCs to offer competitive financing terms to the foreign importer to match offers from firms of other exporting countries.

In response to these perceived needs, 15 state governments had obtained authority to operate export financing programs by January 1, 1985 and perhaps 30 others were exploring the options.[13]

Locally, specific legislative actions to provide export financing assistance have centered around the formation of an "Oklahoma World Trade Development Authority (WTDA)." [House Bill 2004, 2nd Session of the 41st Legislature, 1988] Its purposes would include: finance counseling, procuring insurance guaranteeing funding against political or commercial loss, and providing guaranteed funding for any eligible export loan through participating banking organizations. Authority for the WTDA to issue bonds continues under debate while discussions are being held on administrative guidelines and specific procedures to be followed. A group of bank officers and financial consultants has been convened by the Oklahoma Department of Commerce to formulate recommendations.

### Export Trading Company Sponsorship

General Recommendation. *State governments need to establish export trading companies (ETCs) as quasi-governmental agencies to facilitate, or fully conduct as title-holding owners, the international trade of small and medium-sized companies.*

United States' fascination with export trading companies apparently stems from the success of the large Japanese trading companies—the sogo shosha. Other countries have adopted similar organizations to foster internationalization of their economies—especially, Korea, Taiwan, Thailand and Turkey. Europeans have the modern-day derivatives of the original trading companies authorized to conduct (and monopolize) business with their colonies.

American internationalization followed a quite different track of worldwide diversification of products, geographic markets and business functions with large manufacturing concerns attaining a scale that dictated the now familiar patterns of the multinational corporation operating in a free enterprise business framework. Nevertheless, as a means to try to ease the problem of increasing trade deficits, the U.S. Congress passed the Export Trading Company (ETC) Act into law in 1982 with an intent to encourage development of large trading firms with adequate bank funding and other services to provide one-step exporting services for the SMCs and otherwise mimic the performance of the envied ETCs of the rest of the world.

Within Oklahoma, the most detailed call for creation of a state-supported ETC was included in the Tulsa recommendations. In this report the ETC would be a "full-service, special-purpose trading company" to serve the SMCs. It would involve:

- identifying potential clients and products to represent,
- screening companies for high probability of success,
- test marketing and overseas sales trips,
- negotiating exclusive marketing agreements for several years, and
- designing and implementing an appropriate marketing plan for each client.

As originally perceived, the concept of an ETC was as a company, either publicly or privately owned, to assume the risks associated with international trade by taking title to products of the SMCs and handling export operations.

However, only one public ETC had been formed, a unit in North Dakota specializing in agricultural products to Central America. Indeed, one must be skeptical of public sector management of ETCs given the history of failure of the bank ETCs (the Sears World Trading Company, for example), and the lack of an historical pattern of close cooperation of American business and local government in management tasks.

A more promising approach might be to consider whether "reasonable" special subsidies, tax holidays, etc. might encourage private sector ETC formation. This tack was recently considered in the Oklahoma Legislature as a local ETC incentive.

### Foreign Presence for Market Development

General Recommendation: *An "almost necessary" condition for developing foreign markets and reverse investment sources is to establish state offices near the foreign markets being developed. These efforts must be supplemented with adequate trade missions, trade show participation and the exchange of delegations.*

Because of the frequently great geographic, and often cultural and psychological, distances that separate buyers and sellers in international marketing, new and effective forms of communication must often be learned by new American exporters. Communications theory emphasizes the process of establishing a "commonness of thought" between parties involved with both verbal and nonverbal forms of expression. The process can be inhibiting to trade development when different languages, cultures and forms of business practice are involved.

In export development, the primary forms of international communication are business and trade journals, direct mail, trade fairs and missions, and personal selling.[14] Each channel offers alternative benefits and costs for establishing the contacts for locating potential buyers and most channels are supported with U.S. Department of Commerce and U.S. Department of Agriculture contact programs and other promotional activities.

At the state level, local offices of these federal departments help publicize these services and assist firms in their utilization. State offices increasingly supplement these activities with local export promotion and assistance programs.

The core of the state-sponsored foreign presence for international trade and reverse investment promotion is a state's foreign office. As of 1987,

> ...at least 30 states have foreign offices, for a total of 67 offices in 15 different countries. Japan is the most popular location with 23 states represented; Belgium is second with 10 state offices; Germany has 9, England 6, Hong Kong and Canada each have 4 and Mexico and Korea have 2 each. In addition, Brazil, China, India, Italy, Norway, Sweden and Switzerland have 1 state office each. The average spent annually on a foreign office is $177,000 and the average staff size is 2.7 persons.[15]

Oklahoma established foreign offices and/or contact assistance in Japan, England, Hong Kong, Singapore and India. The latter was the first state office to be established in India. Private firms have provided a major source of funds for these offices.

At this point, very little objective data can be cited to ascertain the effectiveness of the investment in foreign state offices or the trade missions and trade fairs that frequently utilize the federal or individual state's foreign physical presence. Research does lead one to anticipate, however, that firms utilizing these forms of services have the following export marketing behavior characteristics:

- more systematic and thorough preparation for off-shore market involvement,
- more clearly expressed and focussed perception of market entry decision and problem factors,
- greater clarity in their direction of marketing effort (and resultant events) following market entry,
- a more proactive approach in their marketing and export marketing management, and
- a greater awareness and use of government export marketing services...[16]

Thus, it is not difficult to understand the attitude of experimentation present in the recommendations to continue the financial support of foreign state offices and actively pursue trade and investment missions to establish the important initial contacts that can be developed into long-term buyer-seller or investor relationships.

## Coordination and Planning of the Assistance Network

General Recommendation: *The efficiency and effectiveness of resources devoted to export promotion and reverse investment attraction could be significantly increased with coordination and joint planning among the many trade associations and public sector assistance organizations.*

The international trade development network consists of numerous individuals, firms and organizations in both the private and public sectors which facilitate international business decision-making and the ultimate transactions of exchange.

Within the public sector, assistance in exporting manufactured products and services is provided by a joint federal-state partnership of international trade specialists known as Oklahoma International Export Services (OIES) with offices in Oklahoma City and Tulsa. A similar range of specialized services for agribusinesses is made available through the Oklahoma Department of Agriculture. Other government agencies, trade associations, chambers of commerce and the port authorities and foreign trade zones also provide support services, information and infrastructure for international activity. Universities provide business development assistance through O.S.U.'s Center for International Trade Development, a network of small business development centers supported by Oklahoma Small Business Administration, and individualized institutional arrangements for general economic development assistance and applied research services. And, private sector council is solicited through the District Export Council for exporting and the Governor's International Advisory Team for reverse investment.[17]

Coordination of missions and activities of the various public agencies involved in international trade development already occurs to some degree; however, calls for additional cooperation and identification of unique services are frequently made. The most recent task force report, for example, called for legislative action to "establish a communications hub..." and to "establish an overview committee to review actions" of the Department of Commerce, Department of Agriculture, O.S.U.'s international trade program and other relevant university programs.

Recommendations of a similar nature are implied in the strategic guidelines for implementing the Arthur D. Little, Inc. trade development program for Tulsa:

(1) Focus on selected markets offering significant potential for a broad range of Tulsa companies...,

(2) Integrate trade development into a broader economic development strategy and coordinate activities of key players and institutions, and

(3) Provide effective leadership.

## Agricultural Trade Development

General Recommendation: *Special programs and resource commitments should be dedicated to product development and marketing of high value-added, processed agricultural products and the technology and* *associated equipment and services of the agricultural sector.*

Agricultural production and farm incomes in Oklahoma are dominated by wheat and cattle and their related products.

Wheat production and trade patterns have varied considerably over recent periods. Seven producers—China, USSR, EC-12, U.S., India, Canada and Australia—routinely produce over three-fourths of the world supply. Export trade is similarly concentrated with about 80 percent of world trade supplied by the U.S., Canada, EC (esp. France), Australia and Argentina. Furthermore, four of the five top importers in 1985 attempted to meet world market complications with state trading purchase practices. Obviously, market factors are intricately mixed with managed international trade and domestic support programs. Given huge surplus stocks, an inelastic income elasticity for consumer demand and almost universal self-sufficiency objectives, prospects for significant additional sustained foreign sales of U.S. wheat are not encouraging.[18]

The world's top beef producers for the past two decades have been the U.S., the USSR, Argentina, Brazil and France. The top exporters, however, have not been as stable. While Australia and New Zealand continue in this top group, the traditional exporters of Argentina, Uruguay and Ireland have been displaced by Brazil, France and Germany. The U.S. and USSR are traditionally large beef importers as well as large producers. The extent of domestic and export subsidy programs varies greatly among countries with substantial quota protection afforded producers in Japan, Korea and Taiwan. Negotiating conflicts will inevitably arise among those with no subsidies, the high-subsidy countries and numerous developing countries with apparent comparative advantages in cattle production. Trade prospects must be considered brighter for cattle than wheat due to world-wide market growth for beef with rising incomes and potential for sales of breeding stock and genetic materials.[19]

The future prospects for these and other agricultural commodities are undoubtedly linked to on-going negotiations concerning both the rules for international trade in agriculture and the nature of countries' domestic agricultural support systems. One must, however, accept a high probability that the long-run downward trend of decreasing real prices for agricultural commodities will continue and look to technological advances, new value-added products and market development for increasing incomes in the agricultural sector.

With these trends in mind, the Oklahoma Department of Agriculture has adopted a series of international market development objectives to support the agribusiness sector with numerous forms of financial and technical export assistance and an active program of market development through representation of processed foods and other agricultural products in international trade shows, trade lead generation and dissemination and a close association with applied research activities of O.S.U.'s Agricultural Experiment Station.

## Long-Run Human Resource Development: International Education

General Recommendation: *Education of "internationalists," beginning with extensive foreign language training in grade schools, and following with a progressive, internationally-oriented curricula through college level instruction in world economics, international relations, cross-cultural sensitivity and international business is required to gain the attitudes and skills needed to fully integrate Oklahoma's economy into the global economy.*

Few would seriously doubt the commonly accepted belief that our apparent indifference to export opportunities is related to a lack of international education in our schools and colleges, especially in the nation's colleges of business administration.

Reasons for this failure have been presented in many studies. One summary illustrates the analysis by stating a basis for the lack of international education in terms of five widely held misconceptions of American society:

(1) "America is an Island"
(2) "Trade is for Multinationals"
(3) "International Business is a Separate Field of Study"
(4) "Ride out the (trade deficit) Storm"
(5) "Language Studies are for Linguists"[20]

A more positive case for international education in today's global market environment was presented to the state's comprehensive universities by Mr. Sven Groennings in an insightful quotation:

> The globalization of the American economy is the second wave pushing internationalization, following global political-military concerns, and it appears to be the larger wave. It is the major reason why attention in international education is shifting from graduate to undergraduate education, and why internationalization has become important not only at institutions educating for international expertise but at higher educations generally.[21]

The essence of the recommendations to the administrators of our nation's colleges and universities is also quite broad and unmistakable:

> Given the increased internationalization of the economy, colleges and universities are strongly encouraged to increase their teaching of international studies, including foreign languages and cultures... Given the growing interdependence of the American and world economies, it is crucial that U.S. students and workers become more knowledgeable about other countries and cultures...Colleges and

> universities must significantly strengthen their international studies courses—language, cultural, political and economic—and make them readily available to U.S. business executives as part of their lifelong learning programs. [Groennings' quotation from *An Action Report for American Competitiveness.*]

Oklahoma universities have generally begun to include elements of this international education in their regular degree offerings and all will inevitably do so. Accreditation standards, peer pressures and the evolution of education at the leading institutions that supply faculty will ensure at least gradual improvements in the quality and breadth of these offerings. Hopefully, however, regional leaders in the internationalization effort will emerge to help foster the integration of international education, international business development and the general university contributions to economic development to provide Oklahoma the expertise in these fields so desperately needed for diversification consistent with the trends of the global economy.

### Policy Research and Advocacy by the State Legislature

General Recommendation: *Regional international trade impacts and concerns are sufficiently important to local economic development that state legislators need to identify international trade and investment impacts of state and federal policies and maintain closer liaison with congressional delegations to provide input to national commercial (and, as appropriate, foreign) policy formulation.*

In the terminology of researchers with the Southern Governors Growth Board, first-generation trade development strategies consist of direct export and reverse investment assistance aimed at individual businesses such as export counseling, marketing research, export financing, trade missions, etc. "Second-generation strategies, on the other hand, are not so much an extension of existing technical assistance programs as they are investments in the medium- to long-term future competitive position of the state." They are frequently investments aimed at the state government itself.[22] Such strategies are comprehensive and involve a broad spectrum of government agencies. They reflect an understanding of the need for process-oriented approaches and interagency coordination with local, regional, national and even international groups.

The specific topical categories identified as second-generation strategies for state government improvement include:

- state participation in federal foreign and trade policy debates,
- better information gathering and dissemination,
- the development of a trade policy "infrastructure" for the governor and the legislature, and
- the development of "higher order" cooperative programs integrating international trade and general economic development.

A case can be made that state governments can no longer ignore international matters as they impact state goals and state policy effectiveness. States clearly cannot make U.S. foreign policy, but local leadership can become informed about, and sensitive to, local impacts and opportunities and can be certain that these interpretations are understood by the federal congressional delegations and cabinet-level departments. When appropriate, regional associations of states or industries can help facilitate these trade development processes.

### Reverse Investment

General Recommendation: *Oklahoma and her major metropolitan areas should encourage foreign direct investment in Oklahoma as a source of new technology and employment. Promotion efforts to encourage new plants and joint ventures should be concentrated in targeted countries, stressing regional comparative advantages and business sectors and services identified in detailed analyses.*

From a national point of view, it can be argued whether or not unrestricted direct investment with the ability to manage and control the company on the part of foreign owners is the best policy to pursue. Some argue for as much freedom as possible while others call for various degrees of restriction, or at least reporting and taxation, depending on the type of investment, e.g., farmland and forests, firms with defense contracts, the extent of industrial R&D expenditures, etc.

From a state point of view, however, few people supportive of general economic development question the benefits of a particular state acquiring a new plant, joint venture, acquisition or merger on the part of foreign owners. Given that foreign owners of U.S. dollars are going to investment directly in plant and equipment rather than stocks, bonds or treasury bills, it's better to have the investment (and jobs) in Oklahoma than elsewhere, so the reasoning goes.

### International Tourism

General Recommendation: *The Oklahoma Legislature should consider adopting a comprehensive tourism policy including encouragement of foreign visitors.*

Tourism, like agriculture, manufacturing and energy production, is most often considered a "basic" industry serving significant clientele residing outside the state and thereby substantially adding to the state's income and employment via "multiplier effects" of economic development.

The legislative report noted specifically the trend in other states towards a *state* tourism policy "...which takes into consideration the need for public/private cooperation and long-range planning for tourism development."[23] The tourist industry does consist of many small service providers and local community elected officials who lack the individual profit potential to justify international tourism promotion and the marketing skills to fashion cooperative advertising campaigns. A concept of a cooperative forum for education and training and a joint effort at identifying potential foreign markets and conducting marketing campaigns is worthy of a feasibility study.

## Summary and Conclusions

Formal economic development programs of individual states (and occasionally individual cities) are rapidly growing and evolving tools of state policies. Activities that centered on attraction of business to a given location in the early 1970s have now been supplemented with efforts to create, expand and retain local businesses. In a recent book describing recent state policies, the following emerging state economic development roles were highlighted:

(1) ...*economic development* is *conceived as a process* that occurs predominately in the private sector, but is affected ...by a wide range of state actions...

(2) In the new role, the state employs *an active strategy to improve its competitiveness* by confronting and taking advantage of prevailing economic forces.

(3) ...a fundamentally different set of institutional arrangements ...is used to accommodate the new strategic orientation, *institutions that are more versatile and flexible* in permitting the state to anticipate, specialize, experiment, integrate, evaluate, and adjust in dealing with new and changing economic forces.[24]

Local area programs for international trade development are a particular example of efforts devoted to this emerging and expanding role for state economic development policy.

Oklahoma does have an active program of international trade development involving a broad base of both private and public sector participants, several uniquely efficient features[25] and an excellent base for additional beneficial services in the traditional service areas of export promotion and marketing, export education and training, and export financing. As with most public sector decisions, future potential and success is limited only by the public commitment of resources to the mission and efficient management and evaluation of what is already provided.

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10/20/88

# OKLAHOMA BUSINESS BULLETIN

CENTER FOR ECONOMIC AND MANAGEMENT RESEARCH
COLLEGE OF BUSINESS ADMINISTRATION
THE UNIVERSITY OF OKLAHOMA

CONGRESSIONAL INFO. SERVICE/SRI
ATTN: ROBERTA B. MASON
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ISSN 0030-1671

October 1988

VOL. 56, ISSUE 10

## SUMMARY OF INDICATORS

| Category | 7 Mos. '88 | 7 Mos. '87 | July '88 | Percentage Change<br>7 Mos. '88/'87 | Percentage Change<br>July/June '88 |
|---|---|---|---|---|---|
| **Personal Income (Monthly Average)** | | | | | |
| Unadjusted ($000,000) | 3,576 | 3,394 | 3,636 | 5.4 | 0.6 |
| Adjusted for CPI ($000,000) | 3,056 | 3,014 | 3,068 | 1.4 | 0.2 |
| **Crude Oil Production (000 bbl)**[a] | 60,714 | 61,923 | 9,889 | -2.0 | -4.4 |
| **Natural Gas Production (000 mcf)**[a] | 1,125,068 | 1,005,786 | 149,716 | 11.9 | -10.3 |
| **Industrial Power Sales (000,000 Kwh)**[b] | 4,887 | 4,688 | 756 | 4.2 | 2.2 |
| **Total Bank Deposits (Monthly Average) ($000,000)**[c] | | | | | |
| Demand | 7,591 | 7,503 | 7,606 | 1.2 | -1.3 |
| Savings | 24,538 | 25,660 | 24,424 | -4.4 | -0.4 |
| **Savings and Loan Associations ($000,000)**[a] | | | | | |
| Assets | 10,349 | 9,811 | 10,457 | 5.5 | 0.8 |
| Mortgage Loans Closed | 367 | 598 | 59 | -38.6 | -11.1 |
| **Employment** | | | | | |
| Total Labor Force | 1,525.5 | 1,571.4 | 1,517.7 | -2.9 | -0.8 |
| Total Employment | 1,424.6 | 1,448.8 | 1,422.1 | -1.7 | -0.9 |
| Unemployment Rate | 6.6 | 8.1 | 6.3 | — | — |
| **General Business Index** | 94.5 | 93.6 | 94.5 | 1.0 | 0.3 |

Note: Includes revisions.

[a] 6 months and June data. Natural gas includes casinghead gas.

[b] Sales cf larger privately owned utility companies.

[c] Total deposits of all depository institutions.

## RETAIL TRADE IN SELECTED CITIES
($000)

| City | July '88<br>Adjusted | July '88<br>Unadjusted | Adjusted<br>'88/'87<br>7 Mos. | Adjusted<br>1988<br>July/June |
|---|---|---|---|---|
| Ada | 14,777 | 14,833 | 1.9 | 3.2 |
| Altus | 13,940 | 14,164 | 3.8 | 6.6 |
| Alva | 4,407 | 4,240 | 3.4 | 8.5 |
| Anadarko | 4,969 | 4,944 | 6.8 | -0.9 |
| Ardmore | 20,767 | 21,526 | 7.2 | 2.6 |
| Bartlesville | 21,178 | 21,765 | 4.0 | 1.1 |
| Blackwell | 3,964 | 3,785 | 17.7 | 10.7 |
| Broken Arrow | 21,316 | 21,766 | 11.2 | 2.0 |
| Chickasha | 10,361 | 10,441 | 7.5 | 0.2 |
| Clinton | 7,865 | 7,761 | 11.1 | 7.7 |
| Cushing | 5,700 | 5,616 | 5.3 | 0.5 |
| Del City | 12,001 | 12,372 | -2.3 | 6.3 |
| Duncan | 18,490 | 18,237 | 20.3 | 5.3 |
| Durant | 11,317 | 11,551 | 6.0 | 3.7 |
| Edmond | 27,004 | 27,130 | 17.4 | 6.8 |
| Elk City | 8,555 | 8,884 | 10.2 | -0.3 |
| El Reno | 8,982 | 8,892 | 6.9 | 5.8 |
| Guthrie | 5,536 | 5,845 | 6.5 | 0.7 |
| Guymon | 4,767 | 4,756 | 2.8 | 9.2 |
| Henryetta | 5,208 | 5,269 | 8.7 | 2.4 |
| Hobart | 2,801 | 2,812 | 5.4 | 9.5 |
| Holdenville | 3,033 | 3,126 | 5.4 | 2.1 |
| Hugo | 3,009 | 3,135 | 8.7 | -1.9 |
| Idabel | 4,343 | 4,289 | 2.0 | 11.3 |
| Lawton | 50,844 | 51,994 | 5.0 | 4.5 |
| McAlester | 10,753 | 11,048 | 8.7 | 0.2 |
| Miami | 11,991 | 12,045 | 4.9 | -0.1 |
| Midwest City | 37,109 | 36,090 | 7.0 | 2.6 |
| Moore | 13,151 | 13,234 | 3.0 | 0.7 |
| Muskogee | 31,376 | 31,770 | 4.8 | 5.8 |
| Norman | 71,442 | 70,640 | 10.9 | 3.9 |
| Oklahoma City | 309,604 | 302,211 | 4.8 | 7.4 |
| Okmulgee | 5,603 | 5,757 | 3.5 | -0.9 |
| Pauls Valley | 4,682 | 4,609 | 14.2 | 6.3 |
| Pawhuska | 1,956 | 1,867 | 5.8 | 18.5 |
| Ponca City | 17,852 | 17,955 | 11.5 | 2.3 |
| Poteau | 5,296 | 5,362 | 10.6 | 0.9 |
| Sand Springs | 8,996 | 9,183 | 4.6 | 4.1 |
| Sapulpa | 13,911 | 14,224 | 6.2 | 1.8 |
| Seminole | 6,298 | 6,120 | 4.2 | 1.7 |
| Shawnee | 25,235 | 25,758 | 13.6 | -6.5 |
| Stillwater | 24,710 | 23,904 | 7.9 | 1.6 |
| Tahlequah | 7,782 | 8,233 | 1.3 | -2.0 |
| Tulsa | 259,793 | 257,583 | 6.9 | -0.1 |
| Watonga | 1,759 | 1,755 | -1.1 | 2.6 |
| Weatherford | 6,287 | 6,197 | 8.6 | 6.3 |
| Wewoka | 1,267 | 1,250 | 0.6 | 4.0 |
| Woodward | 12,602 | 12,766 | 8.8 | 3.3 |
| **Total** | 1,184,589 | 1,178,694 | 6.8 | 3.4 |

## RETAIL TRADE IN METRO AREAS AND STATE
($000)

| | | | | | Percentage Change | | |
|---|---|---|---|---|---|---|---|
| | 7 Mos. '88 | 7 Mos. '87 | July '88 | | 7 Mos. '88/'87 | July/June '88 | |
| Retail Trade | Adjusted | Adjusted | Adjusted | Unadjusted | Adjusted | Adjusted | Unadjusted |
| **OKLAHOMA CITY MSA** | | | | | | | |
| Food | 1,315,527 | 1,299,346 | 192,821 | 193,805 | 1.2 | 2.6 | -1.9 |
| Apparel | 101,240 | 106,054 | 14,033 | 12,408 | -4.5 | 4.2 | 1.7 |
| General Merchandise | 436,064 | 406,228 | 63,455 | 57,019 | 7.3 | 2.3 | -9.3 |
| Furniture | 136,309 | 146,763 | 21,121 | 21,422 | -7.1 | 3.6 | 2.7 |
| Lumber | 102,790 | 98,284 | 14,281 | 16,353 | 4.6 | -9.2 | -13.4 |
| Auto Dealers | 1,092,178 | 913,727 | 205,304 | 208,094 | 19.5 | 7.7 | 3.9 |
| Service Stations | 120,330 | 118,980 | 17,946 | 18,878 | 1.1 | 4.0 | 3.4 |
| All Other | 441,841 | 414,074 | 62,189 | 61,493 | 6.7 | -2.4 | -7.5 |
| Total | 3,746,279 | 3,503,456 | 591,150 | 589,472 | 6.9 | 3.5 | -1.3 |
| **TULSA MSA** | | | | | | | |
| Food | 773,221 | 771,362 | 116,919 | 118,481 | 0.2 | 4.3 | 0.5 |
| Apparel | 93,647 | 97,232 | 12,153 | 10,252 | -3.7 | 2.3 | -7.1 |
| General Merchandise | 380,697 | 333,670 | 53,986 | 50,185 | 14.1 | 0.1 | -8.1 |
| Furniture | 88,129 | 80,882 | 10,824 | 10,712 | 9.0 | -17.9 | -17.1 |
| Lumber | 75,996 | 81,743 | 10,080 | 11,611 | -7.0 | -10.7 | -12.5 |
| Auto Dealers | 635,474 | 531,648 | 119,454 | 121,078 | 19.5 | 7.7 | 3.9 |
| Service Stations | 98,860 | 97,742 | 14,744 | 15,510 | 1.1 | 4.0 | 3.4 |
| All Other | 83,235 | 93,525 | 7,642 | 9,460 | -11.0 | -43.2 | -35.0 |
| Total | 2,229,259 | 2,087,804 | 345,802 | 347,289 | 6.8 | 1.4 | -2.4 |
| **ENID MSA** | | | | | | | |
| Food | 64,264 | 66,157 | 9,593 | 10,021 | -2.9 | 0.7 | 2.5 |
| Apparel | 9,473 | 10,654 | 1,392 | 1,479 | -11.1 | 3.6 | 18.7 |
| General Merchandise | 29,308 | 27,863 | 4,152 | 3,962 | 5.2 | 0.6 | -1.4 |
| Furniture | 7,348 | 7,169 | 951 | 952 | 2.5 | -28.7 | -24.3 |
| Lumber | 9,058 | 9,275 | 1,224 | 1,459 | -2.3 | -6.1 | 0.1 |
| Auto Dealers | 62,511 | 52,295 | 11,751 | 11,910 | 19.5 | 7.7 | 3.9 |
| Service Stations | 8,868 | 8,771 | 1,323 | 1,391 | 1.1 | 4.1 | 3.3 |
| All Other | 20,243 | 20,527 | 2,862 | 2,953 | -1.4 | 0.5 | -2.7 |
| Total | 211,073 | 202,711 | 33,248 | 34,127 | 4.1 | 1.8 | 1.6 |
| **LAWTON MSA** | | | | | | | |
| Food | 109,945 | 110,687 | 17,088 | 17,080 | -0.7 | 11.7 | 7.1 |
| Apparel | 12,658 | 12,869 | 1,861 | 1,741 | -1.6 | 5.1 | -0.2 |
| General Merchandise | 86,001 | 79,623 | 12,368 | 11,547 | 8.0 | 5.5 | -2.0 |
| Furniture | 16,241 | 15,636 | 2,271 | 2,704 | 3.9 | 1.9 | 26.1 |
| Lumber | 10,361 | 11,405 | 1,411 | 1,612 | -9.2 | -9.4 | -4.7 |
| Auto Dealers | 83,301 | 69,695 | 15,658 | 15,871 | 19.5 | 7.7 | 3.9 |
| Service Stations | 6,056 | 5,988 | 903 | 950 | 1.1 | 4.0 | 3.4 |
| All Other | 21,672 | 24,152 | 326 | 2,551 | -10.3 | -88.1 | -35.2 |
| Total | 346,235 | 330,055 | 51,886 | 54,056 | 4.9 | 2.3 | 1.2 |
| **MUSKOGEE AREA** | | | | | | | |
| Food | 73,804 | 79,084 | 10,546 | 11,804 | -6.7 | 2.1 | 7.8 |
| Apparel | 12,041 | 11,313 | 1,763 | 1,719 | 6.4 | -0.8 | 2.3 |
| General Merchandise | 27,428 | 22,930 | 3,989 | 3,807 | 19.6 | 1.5 | 1.5 |
| Furniture | 6,888 | 7,407 | 987 | 1,001 | -7.0 | 0.7 | -0.5 |
| Lumber | 2,546 | 3,149 | 316 | 386 | -19.1 | -12.7 | -12.7 |
| Auto Dealers | 52,547 | 43,968 | 9,874 | 10,010 | 19.5 | 7.7 | 3.9 |
| Service Stations | 7,751 | 7,680 | 1,156 | 1,216 | 0.9 | 4.1 | 3.4 |
| All Other | 20,494 | 20,977 | 2,658 | 2,659 | -2.3 | 0.6 | -19.6 |
| Total | 203,499 | 196,508 | 31,289 | 32,602 | 3.6 | 3.3 | 2.1 |
| **STATE**[a] | | | | | | | |
| **Durable Goods** | 3,801,428 | 3,325,190 | 655,404 | 679,812 | 14.3 | 2.0 | 1.4 |
| Auto Dealers | 2,728,778 | 2,283,175 | 512,598 | 519,919 | 19.5 | 7.6 | 3.9 |
| Accessory Dealers | 191,724 | 189,920 | 26,356 | 28,953 | 0.9 | -4.1 | -6.7 |
| Total Automotive | 2,920,502 | 2,473,095 | 538,954 | 548,872 | 18.1 | 7.0 | 3.3 |
| Furniture | 197,310 | 188,622 | 26,480 | 27,324 | 4.6 | -4.9 | -3.2 |
| Household Appliances | 137,715 | 129,195 | 19,099 | 19,415 | 6.6 | 3.9 | 0.4 |
| Total Furniture and Appliances | 335,025 | 317,817 | 45,579 | 46,739 | 5.4 | -1.4 | -1.7 |
| Lumber and Building Materials | 320,632 | 326,093 | 44,983 | 50,558 | -1.7 | -7.9 | -10.9 |
| Hardware Stores | 39,009 | 36,483 | 5,355 | 5,496 | 6.9 | -4.1 | -15.0 |
| Total Lumber, Building Materials & Hardware | 359,641 | 362,576 | 50,338 | 56,054 | -0.8 | -7.5 | -11.3 |
| **Nondurable Goods** | 6,187,258 | 6,422,683 | 906,062 | 900,126 | -3.7 | 3.1 | -0.8 |
| Apparel | 349,726 | 364,783 | 46,304 | 43,206 | -4.1 | -1.3 | -0.3 |
| Drug Stores | 286,563 | 316,804 | 38,856 | 36,525 | -9.5 | -8.1 | -12.0 |
| Eating and Drinking Places | 1,093,254 | 1,102,031 | 162,469 | 169,363 | -0.8 | 7.7 | 5.4 |
| Food Group | 2,490,728 | 2,694,515 | 375,765 | 376,305 | -7.6 | 6.2 | 0.9 |
| Service Stations | 395,104 | 390,696 | 58,922 | 61,989 | 1.1 | 4.0 | 3.4 |
| General Merchandise Group | 1,150,494 | 1,105,036 | 166,743 | 152,021 | 4.1 | -3.0 | -8.1 |
| **Total Retail Trade** | 9,988,686 | 9,747,873 | 1,561,466 | 1,579,938 | 2.5 | 2.6 | 0.1 |

[a] Total includes data for categories not shown in the table.

## ENID AND LAWTON MSAs
## MUSKOGEE MA

| | | | | Percentage Change | |
|---|---|---|---|---|---|
| **Category** | **7 Mos. '88** | **7 Mos. '87** | **July '88** | **7 Mos. '88/'87** | **July/June '88** |
| **ENID MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 29,725 | 30,632 | 29,375 | -3.0 | -1.6 |
| Total Employment | 28,075 | 28,196 | 27,950 | -0.4 | -1.6 |
| Unemployment Rate (%) | 5.6 | 7.7 | 4.9 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 450 | 673 | 95 | -33.2 | — |
| Number of Units | 5 | 4 | 1 | 25.0 | — |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Number of Units | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 467 | 434 | 130 | 7.7 | 288.0 |
| Industrial ($000) | 0 | 1,194 | 0 | — | 0.0 |
| Institutional ($000) | 300 | 0 | 0 | — | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 1,697 | 660 | 0 | 157.2 | 0.0 |
| All Other Nonbuilding ($000) | 137 | 278 | 16 | -50.6 | E |
| Total Construction ($000) | 3,051 | 3,238 | 241 | -5.8 | E |
| **LAWTON MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 49,775 | 49,957 | 49,875 | -0.4 | -0.7 |
| Total Employment | 47,078 | 47,432 | 47,250 | -0.7 | -0.7 |
| Unemployment Rate (%) | 5.4 | 5.1 | 5.3 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 8,539 | 12,850 | 566 | -33.5 | -32.2 |
| Number of Units | 111 | 201 | 7 | -44.8 | -41.7 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 180 | 400 | 0 | -55.0 | 0.0 |
| Number of Units | 6 | 16 | 0 | -62.5 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 2,982 | 2,270 | 249 | 31.4 | -86.3 |
| Industrial ($000) | 830 | 20 | 0 | E | — |
| Institutional ($000) | 1,390 | 0 | 90 | — | — |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 1,997 | 499 | 149 | 300.1 | — |
| All Other Nonbuilding ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Total Construction ($000) | 15,918 | 16,039 | 1,054 | -0.8 | -69.4 |
| **MUSKOGEE MA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 31,725 | 32,786 | 30,950 | -3.2 | -2.7 |
| Total Employment | 28,839 | 30,111 | 28,150 | -4.2 | -3.2 |
| Unemployment Rate (%) | 9.1 | 9.0 | 9.0 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 216 | 885 | 0 | -75.6 | 0.0 |
| Number of Units | 2 | 9 | 0 | -77.8 | 0.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 75 | 0 | — | 0.0 |
| Number of Units | 0 | 2 | 0 | — | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 400 | 6,645 | 0 | -94.0 | 0.0 |
| Industrial ($000) | 0 | 20 | 0 | — | 0.0 |
| Institutional ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 3,160 | 464 | 2,578 | 581.0 | — |
| All Other Nonbuilding ($000) | 5 | 0 | 0 | — | 0.0 |
| Total Construction ($000) | 3,781 | 8,089 | 2,578 | -53.3 | — |

Note: Includes revisions.
E = Exceeds 600 percent.

Sources for all tables: Local utilities companies; 10th Federal Reserve District Member Banks; Federal Home Loan Bank of Topeka; Oklahoma Employment Security Commission; United States Department of Commerce, Construction Statistics Division; Oklahoma Department of Transportation, *Progressive Report of the Transportation Director;* Center for Economic and Management Research, College of Business Administration, The University of Oklahoma. The data for all tables were compiled by Marjorie E. Earley, Statistician for CEMR and Brian M. Hickey, Research Assistant.

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**Norman, Oklahoma 73069**

## OKLAHOMA CITY AND TULSA MSAs

| Category | 7 Mos. '88 | 7 Mos. '87 | July '88 | Percentage Change | |
|---|---|---|---|---|---|
| | | | | 7 Mos.'88/'87 | July/June '88 |
| **OKLAHOMA CITY MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 498,743 | 498,633 | 499,400 | 0.0 | -0.7 |
| Total Employment | 471,671 | 471,233 | 474,300 | 0.1 | -0.6 |
| Unemployment Rate (%) | 5.4 | 6.4 | 5.0 | — | — |
| **Mortgage Loans Closed ($000,000)[a]** | 58.4 | 132.6 | 10.8 | -56.0 | 22.7 |
| **Bank Deposits ($000,000)[b]** | | | | | |
| Demand Deposits | 815 | 911 | 856 | -10.6 | -0.3 |
| Time and Savings Deposits | 1,129 | 1,786 | 1,183 | -36.8 | -2.5 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 66,378 | 82,037 | 5,901 | -19.1 | -58.8 |
| Number of Units | 943 | 1,318 | 93 | -28.5 | -51.3 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 1,294 | 905 | 0 | 43.1 | — |
| Number of Units | 70 | 44 | 0 | 59.1 | — |
| Nonresidential | | | | | |
| Commercial ($000) | 33,882 | 49,160 | 2,500 | -31.1 | -65.1 |
| Industrial ($000) | 3,828 | 1,698 | 0 | 125.5 | — |
| Institutional ($000) | 8,874 | 7,896 | 281 | 12.4 | -43.7 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 45,172 | 38,242 | 5,684 | 18.1 | 59.3 |
| All Other Nonbuilding ($000) | 1,258 | 2,635 | 31 | -52.2 | -88.7 |
| Total Construction ($000) | 160,687 | 182,582 | 14,397 | -12.0 | -46.7 |
| **General Business Index** | 91.6 | 88.2 | 92.6 | 3.8 | -1.6 |
| **TULSA MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 340,457 | 351,414 | 344,000 | -3.1 | 0.3 |
| Total Employment | 315,528 | 320,028 | 321,300 | -1.4 | 0.7 |
| Unemployment Rate (%) | 7.3 | 8.9 | 6.6 | — | — |
| **Mortgage Loans Closed ($000,000)[a]** | 113.7 | 161.1 | 30.4 | -29.4 | 38.2 |
| **Bank Deposits ($000,000)[b]** | | | | | |
| Demand Deposits | 903 | 855 | 890 | 5.7 | -9.2 |
| Time and Savings Deposits | 2,158 | 2,337 | 2,134 | -7.7 | -0.3 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 64,970 | 76,426 | 8,751 | -15.0 | -18.1 |
| Number of Units | 839 | 1,097 | 110 | -23.5 | -18.5 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 1,298 | 11,095 | 0 | -88.3 | 0.0 |
| Number of Units | 56 | 516 | 0 | -89.1 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 44,207 | 13,608 | 11,976 | 224.9 | -45.3 |
| Industrial ($000) | 12,552 | 5,403 | 1,146 | 132.3 | -37.9 |
| Institutional ($000) | 8,450 | 9,760 | 752 | -13.4 | -87.7 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 24,278 | 20,633 | 3,841 | 17.7 | -29.9 |
| All Other Nonbuilding ($000) | 2,595 | 3,050 | 340 | -14.9 | -38.1 |
| Total Construction ($000) | 158,349 | 139,974 | 26,806 | 13.1 | -42.4 |
| **General Business Index** | 87.6 | 87.4 | 90.2 | 0.2 | 1.3 |

Note: Includes revisions.

[a] By Savings and Loan Associations, 6 months and June data.

[b] Total deposits in large commercial banks (accounted for 36 percent of all commercial bank deposits as of December 31, 1987 for Oklahoma City and 50 percent of all commercial bank deposits as of December 31, 1987 for Tulsa).

## CONSTRUCTION, STATE

| Category | 7 Mos. '88 | 7 Mos. '87 | July '88 | Percentage Change | |
|---|---|---|---|---|---|
| | | | | 7 Mos. '88/'87 | July/June '88 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| **Residential—Single Family** | | | | | |
| **Dollar Value ($000)** | 151,486 | 186,500 | 16,169 | -18.8 | -40.2 |
| **Number of Units** | 2,056 | 2,801 | 225 | -26.6 | -37.5 |
| **Residential—Multi Family** | | | | | |
| **Dollar Value ($000)** | 3,753 | 12,597 | 0 | -70.2 | — |
| **Number of Units** | 214 | 580 | 0 | -63.1 | -- |
| **Nonresidential** | | | | | |
| **Commercial ($000)** | 89,701 | 80,955 | 16,742 | 10.8 | -47.3 |
| **Industrial ($000)** | 21,750 | 8,680 | 1,479 | 150.6 | -44.6 |
| **Institutional ($000)** | 23,111 | 22,592 | 1,177 | 2.3 | -84.5 |
| **Nonbuilding** | | | | | |
| **Streets and Highways ($000)** | 183,881 | 136,939 | 33,899 | 34.3 | 34.2 |
| **All Other Nonbuilding ($000)** | 4,197 | 6,245 | 411 | -32.8 | -54.1 |
| **Total Construction ($000)** | 477,878 | 454,507 | 69,877 | 5.1 | -27.6 |

**Note: Includes revisions.**